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ABSTRACT

In the fifth volume of a 10-volume report, the development of federal dissemination-related school improvement policy is depicted through short case studies of nine distinctly different programs sponsored by the Department of Education: Elementary Secondary Education Act (ESEA) Title III/IV-C, the Joint Dissemination Review Panel, the National Diffusion Network, ESEA Title I, the Follow Through Program's Resource Centers, the Handicapped Children's Early Education Program Outreach Centers, the Market Linkage Project created by the Bureau of Education for the Handicapped, and ESEA Title II's Basic Skills Improvement Program. Assumptions about the transfer of information and practices and the ways in which these assumptions and the developing dissemination knowledge base influenced individual program strategies are explored. Thirty-two specific recommendations for restructuring and redirecting federal school improvement efforts are discussed. (TE)

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Dissemination for
School Improvement:
An Analysis of Nine
Federal Education
Programs

EA 016 484

Volume V

Dissemination for School Improvement: An Analysis of Nine Federal Education Programs

**Glenn Shive
Jeffrey W. Eiseman**

**A STUDY OF DISSEMINATION EFFORTS
SUPPORTING SCHOOL IMPROVEMENT**

**David P. Crandall, Ed.D.
Principal Investigator**

**The NETWORK, Inc.
Andover, Massachusetts**

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PREFACE

The Study of Dissemination Efforts Supporting School Improvement was a comprehensive, three-year examination of a broad spectrum of federal and state dissemination activities. It included a close look at selected strategies designed to improve schools by promoting the adoption and use of new educational practices developed with federal support. Sponsored by the Office of Planning and Evaluation of the U.S. Department of Education, the study was conducted by The NETWORK, Inc., in collaboration with several other research and development organizations, including the University of Texas' R&D Center for Teacher Education, the American University's Knowledge Transfer Institute, the Center for Policy Research and UCLA's Center for the Study of Evaluation.

The study examined four distinct levels of the educational system: federal, state, external agent, and local. A "zoom lens" design began with an overview of forty-five programs in the U.S. Department of Education that engaged in dissemination or dissemination-related activities. Fifteen of these programs were selected for in-depth analysis at the federal level. At the state level, we examined dissemination activities in ten states representative of the continental forty-eight.

Four strategies, each reflected in a selected federal program, were chosen for in-depth investigation at the local level. The strategies, and their programmatic exemplars, are:

- Interpersonal Linkage of Validated Practices, exemplified by the National Diffusion Network (NDN), including its ESEA Title I subnetwork
- Commercial Distribution, exemplified by the Bureau of Education for the Handicapped Marketing Program
- State Administration of Dissemination, exemplified by ESEA Title IV-C Adoption Grants
- Local Development/Invention, exemplified by ESEA Title IV-C Development Grants

A close look at 146 schools and school districts in the ten states, whose improvement efforts were supported by one of these programs, allowed us to answer three important questions:

1. To what extent are new practices supported by the federal programs being implemented in schools?
2. What factors influence successful implementation?
3. How are policies, conceived at one level, implemented at other levels?

Because three of the four programs chosen rely on implementing practices developed outside the local setting, we were interested in the vehicles employed by the programs for dissemination, particularly the assistance provided by external agencies and individuals.

Focusing-in the lens one more time, we conducted an intensive field study of twelve of our local sites over the course of a school year. Here, we were able to examine the interpersonal and organizational dynamics surrounding implementation as school people worked to incorporate innovative practices.

The study as a whole was a massive effort that required the energies and resources of countless people. Altogether, we:

- interviewed and surveyed over 5,000 educators;
- accumulated over 1500 hours of interview tapes;
- spent over 700 person-days "on the road;"
- made approximately 150 observations; and
- analyzed over 400 documents.

The three years were spent in design (Year 1), data collection (Years 1 and 2), and data analysis (Years 2 and 3).

The master report, People, Policies, and Practices: Examining the Chain of School Improvement, consists of ten volumes which describe the results of the study. Volume I (Setting the Stage for a Study of School Improvement) sets the study within a framework of federal school improvement policies and past studies of these policies. The objectives, design, and research methodologies used in the study are also described.

Volume II (Portraits of the Changes, the Players, and the Contexts) describes what was found in the 146 school districts that comprised our local site sample. Characteristics of the people, the innovations, and the settings are reported, as are the contributions of external assistance and the outcomes accrued from involvement in school improvement.

Volume III (Models of Change) introduces the causal models of the school improvement process that helped us determine what factors influenced success. The findings are reported for several outcomes at both the organizational (school) and individual (teacher) level.

In Volume IV (Innovation Up Close: A Field Study in Twelve School Settings), we examine the dynamics of twelve districts -- varying in experience with the new practices, in community type, and in the scope of their efforts -- involved in improvement efforts supported by the National Diffusion Network or ESEA Title IV-C

Local Development Grants. The volume provides an in-depth picture of the motivations, behaviors and aspirations of school people as new practices are implemented and maintained.

Volumes V, VI and VII analyze the government's role in dissemination for school improvement. In Volume V (Dissemination for School Improvement: An Analysis of Nine Federal Education Programs), we profile nine widely different federal programs sponsored by the then U.S. Office of Education. The volume examines the assumptions underlying the programs, and how these shaped each program's dissemination strategy.

In Volume VI (Dissemination at the National Institute of Education: Contending Ideas about Research, Practice, and the Federal Role), six federal dissemination programs funded by the NIE are examined. We tell the story of the programs' emergence, implementation, and -- to the degree possible -- impact, and discuss implications of the programs for the federal role in dissemination.

In Volume VII (Configuration of Federal and State Dissemination Activities), we present a comparative analysis of federal-state relationships for dissemination and school improvement in our ten sample states. We examine the impact of federal initiatives and other critical influences on the roles and operations of state education agencies.

Volume VIII (The Infrastructure of Innovation: The Case of the National Diffusion Network) examines the communication and rewards structure of a single federal program -- the National Diffusion Network. We examine the NDN as a decentralized service delivery system which has evolved to a grass-roots effort with greatly reduced dependence upon federal leaders for direction and control. Network analysis, based on a census of all members and adjuncts of the NDN, provides interesting insights into a unique federal program.

Volumes IX and X summarize our efforts. Volume IX (Implications for Action) integrates findings from all components of the study, and discusses implications for policy and practice at all levels of the educational enterprise. Volume X, our Executive Summary, provides a distillation of study methods and findings for a general audience, as well as an annotated bibliography of the report series and related study documents.

ACKNOWLEDGEMENTS

The Study of Dissemination Efforts Supporting School Improvement engaged literally a cast of thousands. At the peak of activity, it involved some 5,000 educators from all parts of the country, with a wide range of roles and responsibilities, whose only commonality was the desire to improve the education of our nation's youth. Although it is impossible to personally thank everyone, we pause here to acknowledge their important contributions.

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SCHOOL IMPROVEMENT EFFORTS ARE ALIVE AND WELL
IN SCHOOLS ACROSS THE U.S.!

And, on a more personal note:

They said it couldn't be done; parts of it, yes. The whole humongous thing? No way! But we believed, we persevered, and we succeeded.

Managing (producing?) an enterprise of this scale and complexity was not unlike being entrusted with a string of race horses while also being expected to efficiently operate race tracks all over the country. One's charges must run, sometimes for practice, sometimes in claim races, sometimes for fun, and sometimes for substantial purses. At the tracks, stands must be cleaned, popcorn purchased, receipts counted, special events trumpeted, sound systems repaired. Oh yes, add to this the necessity of producing a comprehensive story of each season's successes (and failures), with appropriate statistical detail for the aficionados and photos for the occasional attendee. Perhaps such images will help you connect with the range of reactions I have had to this point, when all that remains of the season is the final manuscript which down-plays the thrills and recalls the tribulations.

Although flashes of Hercules and his labors in the stables come to mind, as do painful recollections of the occasional reluctance of the imported studs to perform as desired, and more than a few false breaks at the gate, overall I am immensely satisfied with both the process and the product of our collective odyssey. On balance, it was a frolic with a wonderful group of thoroughbreds.

All the players in our production performed admirably; their contributions were manifold. Three are worthy of special mention, one whose contribution was the necessary catalyst at the front-end, enabling our adventure to commence and continue; one whose firm hand kept us on our course; and another whose contribution at the back-end ensured the successful conclusion and chronicling of our journey with style and substance. My very special thanks to:

Ann Bezdek Weinheimer, whose courage in championing our unconventional approach launched us on our journey with confidence. During the study, Ann was our trailblazer and guide through the bureaucratic thickets. We benefited mightily from her detailed and hard-hitting critiques, her unwavering support for our efforts through the low moments and her praise at the high ones. Perhaps most of all, we treasure her belief in us and her infinite patience.

Joyce Bauchner, whose truly special ability moved us from abstract conception to earthly operation. Her commitment to task execution and consummate attention to detail served the study better than the best Master Sergeant. (Plus she's incredibly bright and doesn't smoke cigars.) Her formal titles and responsibilities belie the breadth and depth of her contribution to thinking up and working through this massive endeavor. As she remarked more than once, "Well, no one has ever done this before, but let's get on with it." And we did. My plans and our various teams' intentions, difficult as they were to arrive at, were just the first step. Seeing that they were carried out, by dispersed groups in six locations, on time and budget and in keeping with the overall conception was up to Joyce. Without her we'd still be picking up the stragglers and searching for the lost interview tape.

Susan Loucks, whose capacity for concentration, sustained high quality output and tolerance for my idiosyncracies is surpassed only by her unparalleled modesty, calm and good humor, is the single most important reason that the complex innovation of this study is represented through its master report series and numerous other publications. Individual authors have each made significant contributions in their own right. Weaving individual strands of reasoning into a coherent fabric that is both sturdy and stylish stands as the latest in a string of behind the scenes contributions that have been too often unacknowledged. Hers has been the longest and hardest race of all, because it's been run after the others have bedded down and the spectators have left the track. Had this been a race for the roses, the bouquet would belong to Susan.

Each has contributed in a special way to my realizing a major dream. From a field of exceptionally talented thoroughbreds, they have been a trio of true believers. Without these three, it wouldn't have happened; with them, I would try anything.

David P. Crandall, Ed. D.
Principal Investigator

SUMMARY: VOLUME V

Since the federal government began investing in school improvement in the mid 1960s, its role has changed considerably. Beginning with the funding of demonstration programs to stimulate innovation, the government then turned to close scrutiny of those programs, and finally to dissemination of those that were proven to be effective. The evolution of demonstration to evaluation to dissemination ended with the coming of a new administration whose policies reflect a minimal federal role, turning now to states and local schools as the sources of support for school improvement.

Volume V describes the evolution of federal policy through short case studies of nine efforts mounted by the U.S. Office of Education. They are ESEA Title III/IV-C, the Joint Dissemination Review Panel (JDRP), the National Diffusion Network (NDN), Title I, the Follow Through Program's Resource Centers, the Handicapped Children's Early Education Program (HCEEP) Outreach Centers, the Market Linkage Project created by the Bureau of Education for the Handicapped (BEH), Title VII's National Bilingual Network, and ESEA Title II's Basic Skills Improvement Program.

Each program used a unique approach to dissemination, basing it on different assumptions about the transfer of information and practices. Many programs built their strategies on learnings from earlier programs, and this evolution is part of the case study descriptions.

The federal government's experiences with different dissemination strategies raises several issues for policymakers. These issues, explored in the volume's final chapter, involve what should be disseminated, how dissemination should occur, and who should be involved at each stage of the process. The resolution of these issues results in the assertion that dissemination is a federal function, and that the federal government should maintain and/or establish structures and procedures that help states and local schools access and use effective practices. Thirty-two specific recommendations are made, which can be summarized as follows:

1. Maintain the unit in the federal government (the National Diffusion Network) that coordinates the dissemination of validated practices. Add promising (but screened) practices to its dissemination responsibility.
2. Combine commercial marketing of materials developed with federal support, with training available through federally funded disseminators.
3. Fund disseminators fully and encourages states to provide adopting schools with nominal dissemination assistance grants.

4. Fund external in-person assistance for all but conventional materials, dividing dissemination functions between generalists who provide choice-assistance and practitioner-developers (or certified trainers) who provide training. Require that external facilitators either provide or arrange for follow-up assistance and ongoing support for adopters at the school level.
5. Incorporate a role for state personnel into all federally sponsored dissemination efforts in a way that acknowledges their diversity of interest and capability.
6. Maintain quality control by continuing to validate practices; screen promising practices for coherence and responsiveness to an identified need.
7. Disseminate only validated practices when a sufficient pool of practices exists to address a practitioner need; disseminate promising practices only when such a pool does not exist and the need is urgent.
8. Disseminate materials alone only when they do not require major changes in teaching; disseminate practices (i.e., materials plus teaching strategies and activities) when major changes are anticipated.
9. Carefully establish criteria for the success of dissemination efforts, considering a wide range of both quantitative and qualitative objectives, and varying the criteria by the stage of the development of the area of interest.

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INTRODUCTION

Looking back over the past 15 years, federal school improvement programs have evolved generally from demonstration through evaluation to dissemination. The U.S. Office of Education (USOE) launched many demonstration programs during and after Johnson's Great Society to stimulate local schools to develop a wide range of innovations. During the Nixon administration, skepticism about the effectiveness of many of these efforts prompted a series of summative evaluations. The first demonstration projects began to "come of age" just as their program managers in USOE felt pressured to show positive and widespread return on their investments. Finding and focusing on successes seemed a sensible thing to do. If one found enough nuggets of gold in a mountain stream, then one could make a good case for saving the mountain. Federal programs began panning for the gold of "exemplary practices." By the mid-1970s, the concept of demonstration shifted from proving that an idea had value to showing others how to do it. An era of dissemination programs had begun.

This is an appropriate time to review and reflect on the dissemination efforts of federal education programs over the past fifteen years. We are now at a critical turning point in federal education policy. The activist role played by the federal government in promoting school improvement is being scaled back and reassessed. Three of the nine programs analyzed here have already been consolidated into the Title II block grant of the Education Consolidation and Improvement Act (ECIA) of 1981, leaving local and state agencies to decide how they want to use the money. Other programs may vanish through consolidation in the years ahead. The programs that escape the net of consolidation will continue but probably with fewer resources. The reformulation of the federal role in school improvement could simply be "less and less of the same," or it could take what has been learned from the past and develop a new kind of federal role in support of school improvement. Dissemination may be a useful part of that role. Meanwhile, state education agencies may want or be expected to fill some of the vacuum left by the receding federal presence in school improvement policy. The story of federal dissemination efforts over the past fifteen years may be of use to SEA policymakers as they reassess their place in the intergovernmental system.

In the course of our Study of Dissemination Efforts Supporting School Improvement, we examined nine federal school improvement efforts mounted under the aegis of the U.S. Office of Education. They are ESEA Title III/IV-C, the Joint Dissemination Review Panel (JDRP), the National Diffusion Network (NDN), Title I, the Follow Through Program's Resource Centers, the Handicapped Children's Early Education Program (HCEEP) Outreach Centers, the Market Linkage Project created by the Bureau for the Education of the Handicapped (BEH), Title VII's National Bilingual Network, and ESEA Title II's Basic Skills Improvement Program. We focus on each effort in a separate chapter, in the order in which it was mentioned.

Each program has approached dissemination differently. In order to understand how and why these programs planned and implemented their dissemination strategies, we analyzed documents and interviewed people closely associated with their dissemination efforts.

After completing an examination of individual programs, we analyzed the basic assumptions and formative constraints that shaped each program's strategy for dissemination. These analyses are the first nine chapters of this volume. In the tenth chapter, we address twelve issues that we believe policymakers concerned with dissemination will find of interest. In our discussion of the issues, we draw upon material presented in the first nine chapters, upon our field research in schools (including other components of this study), and upon our experience in the dissemination of educational practices. For each issue discussed, we set forth one or more recommendations.

In addition to this volume, our research team has written two other reports on closely related matters. The first of these is Volume VI of the report series, entitled Dissemination at the National Institute of Education: Contending Ideas about Research, Practice, and the Federal Role (Thompson, 1982); it contains synopses and analyses of six dissemination programs at NIE. The other particularly relevant report, Volume VII, The Configuration of Federal and State Dissemination Activities (Cox & Thompson, 1982), analyzes the relationships between federal dissemination efforts and the school improvement programs of state education agencies; it includes recommendations for future intergovernmental policies in dissemination.

CHAPTER I: ESEA TITLE III AND TITLE IV-C

The original strategy of ESEA Title III was to give seed money to local districts to support the development of "home grown" innovations in a broad range of curricular areas. This strategy for school improvement represented an alternative to the strategy of funding educational R&D centers to produce innovations that would improve schools. The Title III strategy was based on three assumptions. One was that many local schools were capable of inventing good new programs and services if only they had some additional, slack resources for several years. The program placed great faith in the motivations and abilities of local educators to know what needed to be improved. Another assumption was that the districts that really were capable and motivated to innovate could be reliably identified by federal and state panels reviewing grant proposals. Finally, the original Title III strategy tacitly assumed that the best programs would become self-evident, spread naturally beyond their development sites to other schools, and thus benefit education generally.

The original Title III program has undergone many changes since it began in 1965. The administration of grants to the districts was soon transferred to state education agencies (SEA), leaving only 15% of the funds to federal discretion. Many SEAs established priority areas to focus the innovative efforts of local districts. In Washington, the Nixon administration stressed the evaluation of Great Society programs, and generally reduced federal tolerance for open-ended experimentation by local practitioners.

In 1974, Title III was consolidated with six other federal programs, and renamed Title IV-C. One of the few things that Title III shared with the six other consolidated programs was a political constituency that was too weak to spring the program free of the net of consolidation. In the bureaucratic shuffle that followed, the staff who had managed the federal Title III office, and who strongly believed in the localism of its approach to school improvement, were reorganized to manage Title III Section 306 monies and, as a result of their assumptions, learnings, and opportunity, launched the National Diffusion Network (NDN). Meanwhile, the staff who had managed the Title V State Strengthening program took over the local innovation program as part of the new Title IV-C. The Title V managers had dealt primarily with state education agencies, and they administered the program as an extension of their relations with SEAs. They concentrated on simplifying the administration of consolidated federal programs, granting wide latitude to SEAs.

Many SEAs developed procedures for identifying and validating exemplary practices developed by their local Title IV-C demonstration projects. These exemplary projects could apply for additional years of Title IV-C funding to disseminate their models to other districts within their respective states. Rather than an end in itself, local development became for many SEAs the first stage of a process that led to evaluation and dissemination.

While there was substantial support for the assumption that local schools could be improved by adopting a practice that had been developed and proved effective elsewhere, there was an alternative assumption: that when a local school developed a new practice, the benefit to the school came less from the new curriculum than from the process used to identify and solve problems. Federal officials embracing this assumption stressed the importance of involving teachers and parents in school-wide planning councils to guide the innovative process, and to guarantee broad participation and ownership at the building level, not in the district offices.

Thus, during the reauthorization of Title IV-C in 1978, these officials drafted a bill called the Local Education Development Act that made the receipt of IV-C funds contingent upon setting up such a council before launching a developmental project. The bill ultimately failed, but the assumptions of its supporters remain an intriguing alternative to those underlying both the original Title III seed money strategy and the Title IV-C dissemination strategy.

By the end of the 1970s, debates about the role of local development in school improvement had been driven to the sidelines by the dominating focus on fiscal policy. President Carter tried to rescind one-third of the Title IV-C \$146 million budget in FY 1980. The Reagan recisions of 1981 left Title IV-C with only \$66 million. This was a phase-out fund before the program vanished into the Title II block grant created by the Education Consolidation and Improvement Act (ECIA) of 1981. Of this block grant, 80% goes directly to local districts, and 20% to the SEAs. The grantsmanship of Title IV-C has been eliminated, and the principle of concentrating resources for innovation in a few districts has been superseded by an automatic "spread-the-wealth" approach to school improvement. Now each local district decides how much of its meager block grant to spend developing new curricula or, more likely, which materials or equipment can be purchased. Given the austere fiscal climate and the philosophical return to "basics," it is unlikely that many districts will invest. Meanwhile, the 15-year era of federal support for local development appears to be over.

CHAPTER II: THE JOINT DISSEMINATION REVIEW PANEL

The JDRP began in 1972 on the initiative of personnel in the USOE Office of Planning, Budgeting and Evaluation (OPBE), and in the National Center for Educational Communication (NCEC). They believed that it would be irresponsible for the federal government to support or endorse widespread use of a practice without clear or common standards for determining its effectiveness. The originating impulse for creating the JDRP was to centralize the authority and standardize the procedures in USOE for granting "exemplary" status -- and therefore eligibility for nationwide dissemination -- to federally funded projects.

A key assumption underlying the JDRP is that through the systematic and dispassionate application of evaluation procedures, experts can reliably recognize which educational practices are successful and which are not. A second assumption is that the causal factors can be abstracted, transported, and replicated in other schools; if the causal factors are replicated in an adopting site, the same successful outcomes should result. Members of the JDRP have disagreed among themselves over whether the Panel's purpose is simply to determine if the claims of effectiveness made by the evaluations of local projects are actually valid, or whether its purpose is to make positive endorsements that certain projects are worthy of widespread adoption. Thus, a restraining device to some is an endorsing device to others.

Despite the reservations of the "restrainers," validation from the Panel has the effect of an endorsement. The JDRP functions as the gate through which projects must pass before they can apply for federal funds for dissemination. Indeed, the more selective the JDRP is, the more its approval becomes an endorsement. The fewer projects that pass through the gate, the fewer the projects that compete for limited dissemination funding.

The endorsement value of the JDRP serves another purpose in USOE. As federal education programs became politically afflicted by critical evaluations, program managers seek evidence to show that their programs really are improving schools. Validating enough individual projects funded by a federal program can have the cumulative effect of illustrating the positive impact of that whole federal program. Such evidence is useful during budget hearings.

The two-faced god of Janus guarded the doors and gates of ancient Rome. With one face restraining and another face enhancing the federal role in disseminating exemplary practices, the JDRP performs a curious "Janus function" within the education bureaucracy. That function is to mediate between two different types of actors in the bureaucracy.

On one side of the JDRP are the quality control advocates. They are often associated with general function offices, such as planning, budget, evaluation, dissemination, and general administration. Their role is to make the multi-program system

function well. By virtue of their role, if not personal inclinations, they tend to place credence in the authority of science and cool-headed evaluation.

On the other side of the JDRP are "mission" advocates. They are often based in individual program offices, such as Title I, Follow Through, HCEEP, and Bilingual Title VII. They champion specific causes for educational improvement. They nurture the interests of the political constituencies that benefit most directly from the federal programs they manage. Convinced of the vital importance of their missions, they tend not to share the methodological skepticism of the rational managers. Evaluation is just one of many political hurdles they must jump to protect and expand their program from year to year. Closer to practitioners in the field, they tend to place greater credence in their own intuitional and anecdotal knowledge about the effectiveness of "their" local projects and people.

The quality control and mission advocates are often in an adversarial relationship. The JDRP is a formal procedure -- indeed almost a ritual process -- through which each side must come to terms with the other in order to get what benefits them both. Quality control advocates get a central screening mechanism to prevent the dissemination of unproved programs. Mission advocates get the blessing of science that some of their projects are exemplary, and therefore worthy of widespread adoption. Because each gets something important, the overriding impulses to pragmatism on both sides create a context of cooperation that has allowed the Panel to perform its "Janus function" -- guarding the gates to dissemination.

Like everything else in the Department of Education, the JDRP faces an uncertain future. On one hand, the Panel's focus on effectiveness and quality control may appeal to the Reagan administration's search for a more tightly managed government. On the other hand, the Panel exercises federal authority to determine what is effective and what is not, which runs against the anti-federal localism of the administration. The fate of the JDRP may be a bellweather of which theme will dominate in the administration's approach to federal education policy.

CHAPTER III: THE NATIONAL DIFFUSION NETWORK

The National Diffusion Network (NDN) began in 1974 with the last year of federal discretionary money from ESEA Title III. Assuming that the end had come for direct federal support for local innovation, the managers of Title III decided to use their final \$9 million to fund local projects to diffuse Title III innovations that already had been developed. One group of grantees diffused individual programs that had been approved by the JDRP, and another group of grantees helped the schools in their regions to adopt and implement those programs. After showing an impressive number of adoptions, surviving FY 1976 with no funding at all, and broadening its appeal to other program offices, the NDN established itself in USOE as a national "delivery system" for diffusing innovations developed with funds from a broad range of federal education programs.

The NDN strategy is built on three legs. As with a stool, removing any one leg will cause the strategy to collapse. Essentially, the strategy is to take innovations developed by local practitioners, validate them through a formal evaluation procedure, and then diffuse them to schools by means of a network of professional linking agents. The three-legged stool stands on the populism of practitioner-developed knowledge, the scientism of formal evaluation procedures, and the pragmatism of professional linking agents.

Each leg of the stool stands on several assumptions about how to improve schools. Although the assumptions underlying one leg of the stool might not jibe entirely with the assumptions supporting another leg, together they offer "something for everyone" with beliefs and interests in school improvement. The three legs are described below:

- (1) The NDN disseminates what practitioners have developed. The populist assumption is that because the innovations have been developed by local practitioners in real school settings, and not by experts working in the "hothouse" environment of a university or an educational laboratory, they are more likely to be implemented and actually work in other real school settings. Tactically, the practitioner's "signature" on the innovation lends it credibility in the eyes of other practitioners who must be persuaded to adopt it. The NDN's reliance on this populist assumption makes it an extension of the localism of the Title III strategy.
- (2) The NDN disseminates what scientific evaluation has judged to be effective. One assumption of scientism is that a formal and dispassionate scrutiny of outcome measures (usually student achievement scores) can reliably distinguish what works from what does not. Another assumption is that the factors that made an innovation effective can be systematically identified

and abstracted from the organizational context in which it was developed. It is further assumed that these factors, called "key components," can be packaged, transported, and replicated with a reasonable degree of fidelity in schools with different organizational characteristics.

These assumptions have tactical value for the NDN, especially within the federal bureaucracy. They create the idea of a "pool" of good programs that has resulted from federal funding, and that is worthy of nationwide diffusion. They also portray dissemination as a rational process, rather than one contingent on idiosyncratic local factors.

- (3) The NDN disseminates by a corps of full-time, professional linkers who know the practical business of introducing innovative programs into schools. The first assumption of the pragmatists is that good programs do not diffuse themselves. Schools need assistance to help them learn about, choose, and implement new practices. A second assumption is that providing such assistance requires a special knowledge about how schools change and a unique set of communication skills for diffusing educational innovations.

NDN funded two kinds of grantees: one kind was intimately knowledgeable about specific projects, while the other kind had the competencies to link the projects to local schools.

Like three-legged stools, the NDN strategy can be used for a variety of purposes for school improvement. Just as a stool can be used to sit on, to stand on, or to put things on, the NDN strategy can be used as a vehicle to diffuse educational innovations, as a form of professional development for teachers, or as an applied approach to organizational development for schools.

The first of these purposes is to facilitate the widespread adoption of exemplary educational practices. In this view, the problem for which the NDN is a solution is that we have better ways to teach children than are now being used in the schools.

The second purpose is to train teachers and administrators through their participation in implementing new classroom practices. The basic assumption is that to improve or change practices, teachers need help; they need to be reinforced as professionals.

The third purpose is to improve the way schools identify and solve their curricular problems by engaging their leadership in planning and implementing innovative practices. The problem addressed here is that because schools get so totally caught up in the day-to-day demands of schooling, they are slow to recognize and respond to

the rapid changes occurring in their environments. NDN is concerned with enhancing the capabilities of schools to plan for these changes, and to reach out for new ideas and resources for improving themselves.

These three purposes of school improvement are not mutually exclusive. Indeed, there are broad areas of overlap and compatibility. To some extent, to diffuse innovations is also to train teachers, and to train teachers is also to support local leadership for program improvement. The difference lies in one's perspective on the change process. Stated simply, the diffusion viewpoint sees the motive force for change as lying in the technological innovations themselves. The more they are adopted, the more schools will improve. The staff development viewpoint sees the individual teachers who implement the innovations in their classrooms as the key to change. Schools will improve as teachers improve. The organizational development viewpoint sees change as a systemic institutional process that involves ideas, people, money, and a mysterious ingredient called "timing." Because local institutional factors are the motive force for improvement, schools can really change only by changing themselves.

Historically, the diffusion-of-innovations perspective has been dominant in the NDN. Until recently, for example, the NDN was located in the "Division of Educational Replication" within USOE. Now, however, the NDN Division is located in the Office of Educational Research and Improvement within the Department of Education. Professional development for teachers is a good way for the NDN to appeal for the support of the teachers' unions. Diffusion in the service of organizational development is a minority view which, although it has no clear constituency, has some appeal in education policy circles, the education research community, and the field of practicing linkers.

Different actors in the NDN reflect different combinations of these ideas at different times and on different issues. Recurring issues within the NDN have been: (1) the role and value of validation, (2) the importance of faithful replication versus the need for local adaptation, (3) the appropriateness of qualitative versus quantitative measures for evaluating diffusion projects, (4) the importance of follow-up assistance to adopting sites, and (5) the relationship between federal leadership and field initiative in resolving such issues. How one views these issues depends on which leg of the stool one is supporting, and which purpose one believes the whole stool should be used for.

In summary, the NDN program has three strategic components: practitioner-developed knowledge, formal evaluation procedures, and professional linking agency. Each component is based on several assumptions about how to improve schools, and what the federal role in school improvement should be. In addition, the NDN has three general purposes for employing that three-legged strategy: diffusing curricular innovations, professional development for teachers, and organizational development for schools. Each purpose arises from a different general perspective

on school improvement. One starts from technology; another starts from individuals; and the third starts from organizations. The NDN works by striking a dynamic balance among these potentially competing yet practically complementary purposes. That the NDN stool has not tipped over amid all the movement of furniture in the federal bureaucracy is alone a significant measure of its success.

CHAPTER IV: THE PIPS STRATEGY OF TITLE I

The goal of ESEA Title I was to improve schooling for economically disadvantaged children. Its basic strategy was to give money to the states to pass it along to the districts according to the number of poor children they enroll. The assumption behind this strategy was that if schools in low-income areas had more money, they could improve the way they teach the disadvantaged. In the "War on Poverty," Title I's mission was to break the "cycle of poverty" by improving the schools that educate poor youth.

By the late 1960s, several evaluations concluded that despite Title I, schooling for the disadvantaged was not improving. Some policymakers complained that local school people did not have the will to address the problems of disadvantaged students, and that Title I money became general aid by the time it reached local schools. According to this diagnosis, the way to improve Title I was through better regulation and closer oversight to make sure that schools spent their Title I money on the right students.

Another diagnosis of the ineffectiveness of Title I focused not on the will but on the skill of local school people to develop and implement programs that make a difference for poor children. The assumption underlying this view was that local schools need more than just money to improve the way they educate the disadvantaged. They also need new ideas in the form of practical solutions to the managerial and pedagogical problems that arise in educating this population. The way to improve Title I was not just to fix the funding mechanism, but to get better ideas into the schools. The policy issue was not just how to get the money to the right place, but how to improve the way the money was turned into good teaching once it got there.

The story of Title I and its improvement strategies reveals fundamentally different assumptions about the federal role in school improvement. What was the response to the criticism that federal programs "threw money at problems?" Should the Office of Education improve the way the money was thrown, or should it throw something else besides money? The first approach stressed that Title I money would be more effective if it were "targeted" by better laws and regulations. As the search for better regulations proceeded through the 1970s, three kinds of criticism cast doubt on this approach. The fiscal complaint was that the federal government could not afford the money, even if it were thrown more accurately at the problems. The political argument was that a better regulated categorical program meant even more federal intrusion in state and local affairs. The third criticism, which arose more from within the education community, was that schools would not improve by federal money alone. Title I should also disseminate new ideas in the form of model programs to help schools educate their disadvantaged youth. The Project Information Packages (PIPs) were an attempt by policymakers -- within USOE but outside Title I -- to experiment with disseminating successful Title I projects to new sites.

The Evolution of the PIP Strategy

This section traces the PIP initiative through four stages of evolution. The stages are defined by basic changes made in the dissemination strategy for Title I.

In stage one, the strategy was to find good Title I projects, describe them in brochures, and send the brochures to the states for dissemination to local Title I projects. USOE's Office of Planning, Budgeting and Evaluation (OPBE) funded The American Institutes of Research (AIR) in 1968 to identify exemplary Title I programs, and describe them in a series of brochures called, It Works. This strategy encountered three basic problems. Some of the local projects that AIR found to work did not comply with Title I regulations. This in turn contributed to a second problem. State Title I Coordinators did not exert themselves on behalf of dissemination. They were not sanguine about encouraging local districts to adopt programs that did not comply with the regulations they enforced, nor were they told clearly by federal Title I officials that dissemination was important. The third problem was that teachers and administrators found it difficult to understand a model, buy into it, and then implement it in their schools entirely on the basis of a brochure. Change did not happen that way in schools. Dealing with these problems launched the second stage of the PIPs.

In stage two, the strategy was to find promising Title I projects, make sure they met federal Title I regulations, validate them by the JDRP, and then package them so teachers and principals could follow instruction manuals and guidebooks to recreate the successful practice in their sites. The assumption was that if the model projects complied with federal regulations, and if materials were written in a "how to" form with detailed instruction manuals, it would be possible for local districts to recreate the original projects in their own sites.

This stage of the PIPs included a stroke of rational experimentalism in dissemination policymaking. During the school years beginning in 1974 and 1975, OPBE contracted with Stanford Research Institute (SRI) to conduct a field test of the 6 PIPs designed by the RMC Research Corporation. OPBE offered 17 sites two years of funding. The second year disbursement was contingent upon two factors: the teachers in that site had to rely solely on the PIP (that is, they were to refrain from communicating with the PIP's developer) and implement the practice faithfully (that is, they were to strive to make their version of the practice as close as possible to the developer's ideal version). SRI's major findings were: first, that teachers were able to implement practices faithfully without human intermediaries; second, that users reported that they experienced a strong need to interact with others who were familiar with the project; and third, that in the absence of such interaction, the teacher's major motive for working to implement the practice faithfully was to secure the second year of funding (Stearns & Norwood, 1977).

The experiment just described was not designed to answer a question that remained: How were the PIPs going to get from the researchers to the schools? The lack of a diffusion system for the PIPs was rooted in a deeper problem. How could OPBE get the Title I personnel at both federal and state levels to buy into the dissemination of exemplary practices in general, and the PIPs in particular? The search for a diffusion system for the PIPs took two distinct turns. They are described below as the third and fourth stages of the evolution of the PIPs.

In stage three, the strategy was to hire professional disseminators of education innovations to diffuse the PIPs to local Title I projects. In 1976 the NDN received no funding. OPBE contracted with several State Facilitators during this "brownout year" to bring the PIPs to the attention of local Title I school people in their regions. The State Facilitators were successful in inducing schools to adopt the PIPs, but could not substitute for the developers when it came to answering detailed questions about the project in operation. This problem was solved during the fourth stage in the evolution of the PIPs.

In stage four, the strategy was to track down the original developers of the PIPs, fund them to demonstrate their programs as Developer/Demonstrators (D/Ds) in the NDN, provide them technical assistance to acquire dissemination skills quickly, and then hold regional awareness conferences so that developers could present the PIPs to hundreds of local Title I project directors at once. By 1977 the PIPs still had not "taken off." The Facilitators convinced OPBE that the developers had to demonstrate their models to local Title I directors before the number of adoptions and the quality of their implementation could reach federal expectations. Realizing that good developers need support and assistance to be good demonstrators, OPBE supplied technical assistance to 21 Title I D/Ds -- six of whom had developed the PIPs -- to coach them in their new roles in dissemination; the 21 Title I D/Ds formed the first sub-network in the NDN. Furthermore, to tie the PIPs and the NDN system closer to Title I personnel, OPBE launched a series of joint Title I/NDN regional conferences. The conferences put State Title I Coordinators, NDN State Facilitators, and the Title I D/Ds on the same podium before hundreds of local Title I directors. Many local Title I people found out about the PIPs in settings that suggested the tacit approval of State Title I Coordinators.

The first Title I/NDN conferences seemed to be successful. They resulted in 220 adoptions in their first year (1977-1978). The conferences continued into 1980 with staff support from the Regional Offices. Since then, less formal coordination activities have occurred and, like everything else sponsored by the Department of Education, the future of the Title I dissemination activities is uncertain.

PIPs and The Policy Process

The following section analyzes three themes related to PIPs. They concern (1) role inertia and dissemination, (2) cross-program coordination, and (3) experimentalism in federal policymaking for school improvement. The final section will examine the assumptions of replication and their implications for educational dissemination.

Theme 1: Role Ambiguity and Dissemination

Federal officials experienced frustration as they learned of incidents in which State Title I Coordinators told their local people that they could not adopt PIPs because they did not comply with state Title I regulations. What was going on here? State Title I Coordinators did not like to appear to be standing in the schoolhouse door blocking innovation. However, they also did not like disseminators turning the attention of local Title I directors from the state regulation manual to the implementation manual from a validated program, often from another state.

In the Title I bureaucracy, state and local officials have usually negotiated territorial rights in which the state is allowed to stipulate what the locals can do with the money, but the locals can determine how they will actually do it. The fine line between what and how is worked out differently in different states. Much depends on the norms of center-local relations in the state's political culture, the resources the SEA can spend monitoring compliance, and the informal arrangements worked out among individuals who deal with each other on Title I matters year after year.

The dissemination of the PIPs reversed the what/how relationship. Local districts were free to choose whether or not to adopt a PIP. But, if they chose to adopt, they were obliged to follow highly prescribed rules for running their classrooms. Rather than offering local discretion over how but not what, the PIPs allowed local discretion over what but not how.

In other words, the PIPs required that State Title I Coordinators make a fundamental role change. Whereas most of these coordinators were aware that they were being asked to cooperate in disseminating PIPs, probably few could articulate the nature of the role inversion that was just described. More importantly perhaps, federal Title I officials also were not aware of how radically the state officials were being asked to change their roles. Nevertheless, the involvement of state coordinators in key roles in the regional conferences was, for the most part, an effective way to overcome this role ambiguity problem; it engaged them in the experience of the new role in a supportive environment, rather than stalling in the rhetoric of the new role demands.

Theme 2: Cross-Program Coordination in Dissemination Policymaking

One of the great will-o'-the-wisps in federal bureaucracies is coordination. The PIP initiative entailed a three-way

coordination between OPBE, Title I, and the NDN. Why did each side of this triangle get involved in the PIPs, and what did each side get out of it?

Because it administered the evaluation set-aside for Title I, OPBE had a deep interest in making Title I work better. However, OPBE officials were outside the program and often sat in an adversarial relationship to it. OPBE was the home of the national evaluators, while Title I officials tended to believe in the Title I system above all else. The idea of identifying local projects that worked, and then disseminating them for other local sites to replicate, expressed the rational, scientific values by which OPBE operated. To accomplish its mission, OPBE hired knowledge-based contractors directly instead of working through the Title I bureaucracy.

For reasons discussed above, federal Title I officials viewed the PIPs quite differently. They liked being able to point to effective local Title I programs, but they did not like their lack of control over the diffusion process. Title I people referred to the PIPs as the "brainchild of OPBE" and described themselves sardonically as "getting in the way" of its implementation.

This was hardly the stuff of which effective coordination is made. This did not matter so much during the first two stages when developing the PIPs was the major concern. It did matter, however, in the later two stages when disseminating the PIPs became the greatest issue. This is where OPBE turned to the NDN.

The NDN was the progeny of Title III. In the mid 1970s it was mainly interested in surviving after its remarkable birth in the consolidation of 1974. Having received no appropriation at all in FY 1976, the NDN was eager for business just as OPBE was looking for a diffusion mechanism for the PIPs. The NDN knew it had to diversify itself beyond Title III if it was to become a generic diffusion mechanism for USOE programs. What better place to demonstrate the NDN's versatility and value to other federal programs than with the giant of Title I? In addition, the initial image of thousands of local districts using their Title I money to adopt model programs was compelling to the NDN.

The facilitators in the NDN were outsiders to Title I. Their general approach to innovation in schools, and their uses of scientific information about exemplary classroom practices were out of step with the way most Title I programs work. Because the idea of a self-diffusing package didn't work (unless the threat of withdrawing extra funds was present), and because outsiders had difficulty diffusing exemplary models to local Title I programs, the only alternative left was to make a concerted effort to bring Title I state officials into the act of dissemination. This was attempted through the joint Title I/NDN/OPBE awareness conferences, which OPBE paid for. The assumption of the joint conference strategy was: where memoranda and telephone calls from Washington had failed to enlist the support of state Title I

officials, public events in great halls and informal contacts in small corridors of conference hotels would succeed. After the first year of joint conferences, the NDN took a lower profile while the Regional Offices, which were supposed to do something in dissemination, were engaged to run the conferences instead. This expanded the zone of federal coordination even further.

Theme 3: Experimentalism in Dissemination Policymaking

The PIP initiative was often called an experiment. It was part of an evolving search for a dissemination strategy that would improve local programs. When OPBE began with a contract to AIR in 1968, very little was known about identifying and validating model practices. When OPBE contracted with RMC in 1974 to develop the PIPs, very little was known about packaging and disseminating model practices.

The PIP initiative was a policy process that learned from itself. Formal field tests and evaluation reports accompanied most activities. For example, the first PIPs were pilot tested in 1974 and evaluated a year later. When OPBE provided technical assistance to the 21 Title I D/Ds in 1977, they also studied the way technical assistance was given to seasoned developers turned neophyte disseminators. (Harris, Eiseman, Harris & Doyle, 1979) Not only were studies and evaluations carried out, these also were read and incorporated in the discussion of subsequent policy choices.

Experimentation has an important substantive as well as rhetorical function in policymaking. In the case of the PIPs, policymakers in USOE were faced with evidence from evaluation that Title I was not working, and pressure from the Congress and the White House to do something about it. The bureaucratic structure of Title I had already become too decentralized and rigid to be altered much by USOE. What could be done? What approach to improving Title I would be feasible and effective?

All the carefully constructed appearances to the contrary, uncertainty is at the heart of policymaking. It is more the rule than the exception that, in response to an imperative to act, policy is made on the basis of scant information about a program and rudimentary theories for changing it. In this situation, policymakers have two general alternatives. They can project a sense of certainty in order to mobilize support for their initiative, or they can admit they are trying something to see if it works. One posture may be effective in one policy environment and not another. For example, it would not be a good idea to run for office on the promise to conduct systematic experiments with new ideas for solving complex social problems, even though this is what many campaign promises amount to.

Experimentalism is a low-risk approach in the face of high uncertainty because it provides a ready-made way to rationalize failure. Failures are an important part of experimentation. They can be redeemed if they lead to useful learning and subsequent

improvement. If policymaking involves experimentation, then the policymaker must be, in some sense, a scientist. The science of rational management had strong appeal in OPBE. Perhaps its relationship to education makes the education bureaucracy in general amenable to experimentalism in policymaking.

PIPs and the Theory of Educational Replication

The PIPs were based on the assumption that dissemination was a process of transferring and replicating educational technologies. Replication implies a theory of how schools change, and how people in them learn to change. The basic premise is that what one school develops, another school can reproduce.

The logic behind the PIPs went something like this. Good teaching technologies can be specified or "captured" in a set of empirically observed behaviors. Once specified, those behaviors can be clearly described, attractively packaged, and then transferred to other schools in other socio-economic settings. If properly packaged and disseminated, local school leaders will discover and become interested in the new educational technology. As they check it out, they will be assured by the fact that the new technology was developed by other local school people and validated by professional evaluators.

Desiring to improve their educational programs, many local school people will decide to replace their current classroom practices with the new technology. The original premise of the PIPs was that school people could open the box, study the instructions, and then change their classroom practices to conform to the behaviors specified in the model. If the adopting school does what the developing school did, it can expect the similar results in student achievement for which the original program was deemed exemplary. If the adopting school improvises, adapts, or only partially implements the program as specified, there can be no guarantee that the same results in student achievement will occur.

Was the failure of the PIPs to gain widespread adoptions rooted in a fallacy in the theory of replication? Or does the story of the PIPs show an experimental search for what it takes to get replication? The PIPs began with a fundamentalist view of replication. The assumption was that the power to improve schools lies in discrete technologies that could be detached from one organization and inserted into another. The appeal of this idea reflected the general tendency in our culture to seek technological solutions to social problems.

But the PIP strategy has come a long way from its fundamentalist beginnings. When simple, self-spreading replication proved elusive, the PIP policymakers adjusted their pure-print dissemination strategy to accommodate the organizational complexity of schools. First came the facilitators to introduce the PIPs to schools, and then came the developers to demonstrate how the PIPs could be implemented in schools. Accommodations were

made to the regulatory hierarchy of Title I. Insistence on high-fidelity implementation was tempered by a deeper understanding of the subtleties of adaptation and ownership. The theory of educational replication was not put on the shelf with extra PIPs. It developed and adapted through the practice of dissemination.

CHAPTER V: FOLLOW THROUGH RESOURCE CENTERS

Follow Through started in 1968 to follow the children of Head Start through early elementary school. Initiated as a "planned variation experiment," Follow Through was supposed to discover which among many innovative models of early school instruction were most effective in compensating the educationally disadvantaged. Throughout its history, Follow Through has straddled ambiguities about its fundamental goal. Was it a cooperative family of educators serving its own students through a variety of innovative methods, or was it a competition intended to show which of the new theories of early school education worked best in real classroom situations? Was the program's primary mission to serve the children in Follow Through projects, or to produce new knowledge for eventual diffusion to other schools? If the answer was "both," what were the priorities, and how did one relate to the other? Follow Through was able to straddle this ambiguity of purpose until the time came for a summative evaluation.

In 1975 the National Longitudinal Evaluation Study (NLES) pronounced through a storm of controversy that most Follow Through models didn't make much difference to the education of disadvantaged children. The NLES findings accentuated the latent competition within the Follow Through family, and gave its detractors in Congress and the administration some scientific credibility for killing the program.

Convinced of the moral and pedagogical power of their program, the Follow Through program tried to counter the bad publicity from the NLES by telling their own story and pointing out their successes. In June 1977, the Division of Follow Through (DFT) published regulations that authorized the funding of local projects "to conduct expanded demonstration" (Federal Register, June 29, 1977).¹ However, before local projects could receive federal money to do this expanded demonstration, they first had to pass the JDRP. Validating and disseminating individual Follow Through projects would enlist the credibility of science for the side of saving the program. With intensive coaching, 22 projects representing 10 different Follow Through models were validated by the Panel just in time to receive grants in FY 1978 to become Follow Through Resource Centers.

But what did "expanded demonstration" mean in practice? Looking for precedents and models of educational diffusion, DFT sought out the NDN, whose federal offices were several doors down the hall.

¹Although Follow Through's legislation did not call for "dissemination" as such, the term "expanded demonstration" was added to the regulations to refer to the same range of activities usually described as dissemination.

Through a series of conferences with the NDN, Resource Centers became familiar with the strategies and tactics of diffusing educational practices. The Resource Centers began to model themselves after Developer/Demonstrators and seek access to potential adopters through the State Facilitators. The Follow Through models were validated by the JDRP and disseminated by a team of linking agents based in Resource Centers. Because their major motivation to disseminate was to rebuild credibility for Follow Through, DFT emphasized the widespread adoption of Follow Through models as the primary purpose for dissemination.

Most Resource Centers are based in Follow Through project sites and staffed by former Follow Through teachers. They conduct awareness activities, demonstrate their programs, negotiate adoption agreements with schools, train teachers and administrators, and provide follow-up assistance to adopters of Follow Through models. Different Centers have progressed at different rates as they learned the practical skills required to disseminate model programs. After two years of operation, the 21 Resource Centers reported that a total of 133 districts had adopted at least some portion of a Follow Through model.

The 21 Resource Centers became a "sub-network of the NDN." Like the Title I D/Ds who emerged from the PIP initiative, the Resource Centers entered the NDN as a group at one time. Unlike the Title I D/Ds, they had previous mutual associations as part of Follow Through, were funded by Follow Through rather than the NDN, and shared the problems of diffusing relatively complex and expensive models for early elementary education.

DFT never clarified the basis upon which Resource Centers would be evaluated. It was never clear, for example, whether the Resource Centers were competing among one another to score high numbers of adoptions, or whether collaboration would be rewarded come funding time. The role of Model Sponsors in dissemination was never clearly established.

In July 1979, the Acting Commissioner of Education decided that Follow Through's persistent ambiguity over service and demonstration goals should be resolved by deploying 80% of the program's resources in direct service projects, and 20% to producing new knowledge for the benefit of the broader education community.² DFT was also pressured to cut the total budget for Resource Centers from \$3 to \$1 million.

²In early 1979 Joe Wholey, then of DHEW's Office of the Assistant Secretary for Planning and Evaluation (ASPE), conducted an exploratory evaluation of Follow Through to help decide on the objectives of the program. Our study of Resource Centers (Shive, Meleen, Harris, Vaughan, & Grogan, 1980) was initiated a year later to help DFT decide what place Resource Centers played in the new configuration of program goals.

After the Reagan recisions of 1981, Follow Through's budget was cut from about \$44 million in FY 1980 to about \$26 million in FY 1981. Meanwhile, the JDRP validated an additional 27 Follow Through sites, which more than doubled the number of sites eligible to apply for funding as Resource Centers. Even with a possible increase to \$4 million for Resource Centers in the otherwise battered Follow Through budget, the rising number of applicants sharpened the competition, and forced DFT to choose between keeping the old pros and bringing in new blood to the Resource Center program.

In retrospect, Follow Through first discovered dissemination as it sought to counteract the political damage of a negative summative evaluation. Learning to disseminate Follow Through enabled Resource Centers not only to double the number of schools that use some form of a Follow Through model in their classrooms, but also to open a new window in the Follow Through program through which new ideas could enter and old ideas could be rediscovered in new settings. After years of virtually level funding, Follow Through had lost its initial momentum and fought merely to maintain itself in the local districts that received Follow Through funds each year. The Resource Centers gave Follow Through a new possibility for extending its reach and revitalizing its core. Said a trainer in one Resource Center, "Every time we work with a new school, it's like the original excitement of our Follow Through program."

Follow Through, however, was eliminated through consolidation in the block grant of ECIA. The program's impressive lobbying capability was able to stretch out the process of consolidation over three years, but not able to avoid the ultimate end. In our opinion, it is unlikely that many states will choose to sustain Resource Centers to disseminate Follow Through models, especially across state lines. We also suspect that it is unlikely that the local districts in which Resource Centers are based will support dissemination across district lines. However, if dissemination is retained as a federal function because of its role in promoting the interstate commerce of ideas, then perhaps the more effective Resource Centers will be sustained even as the Follow Through program disappears.

CHAPTER VI: THE HANDICAPPED CHILDREN'S EARLY EDUCATION PROGRAM (HCEEP)

HCEEP began in 1969 to develop and demonstrate new ways of educating pre-school handicapped children. The evolution of HCEEP's strategy over the past twelve years can be divided into four basic stages. In its first three years, HCEEP began its take-off. The first pioneers in a new field of education were funded for three-year developmental projects. By the end of this period, HCEEP's budget had jumped from \$1 million to \$10 million and prospects looked good for the young program.

In 1972 the pioneers of the first demonstration projects had completed the three-year funding cycle. HCEEP was beginning to come of age. Of the 24 projects funded in 1969, 18% were continued for a fourth year in a new HCEEP program called Outreach. Each year a new batch of local projects came of age, many of which "graduated" to the outreach program. Meanwhile, the rate of budget growth slowed, and evaluation became a major issue.

P.L. 94-142 launched the third stage of HCEEP, or what might be called its rebirth. In FY 1976 HCEEP got a whopping \$8 million increase, boosting its budget to an all-time high of \$22 million. This allowed HCEEP to continue funding new developmental projects even while increasing the number of "graduates" who were funded as outreach projects.

HCEEP grew and then stabilized at \$22 million during the Carter years. However, the era of limits, or the fourth stage of HCEEP, began in FY 1980 with inflation creeping up and budgets creeping down. HCEEP was cut by \$4.5 million in two years and expected further and deeper cuts during the Reagan years. At least HCEEP escaped consolidation in the first round of the Reagan Congress.

The evolution of HCEEP strategy reflects the just-described pattern of funding.

Old Pros and New Blood

The "take-off" stage was a time of pioneers working in virgin territory. Because early childhood special education was virtually a new profession, HCEEP's early grantees had to invent their own curricular practices and develop their own classroom materials. They also had to solve new administrative problems that arose from educating young handicapped children in school systems. Through national conferences and newsletters, a new professional network emerged among HCEEP's pioneers. Federal program officers became intimately involved in this network and personified the new profession to its early practitioners. HCEEP's director, with an intuitive knowledge of the field, gave charismatic leadership to the young program. HCEEP was infused with an almost evangelical sense of mission to get schools to educate young handicapped students.

The outreach program emerged as HCEEP came of age, and reflected an important shift in HCEEP's overall strategy. Should HCEEP concentrate on developing more new knowledge, or should it gradually shift its emphasis towards disseminating the knowledge that it had already developed? On one side of the issue was the need to explore new variations of basic ideas, and to test the limits of the pioneers' ideas by applying them in different settings with different kinds of handicapped youth. It takes time to be sure that new treatments are sound. On the other side was the need to find the projects that had created good models, materials, and practical insights, and then to spread that knowledge to other schools. After all, HCEEP was a "catalytic" program with a nationwide reach. A few federally funded projects were mere drops in a very big bucket. As more projects came of age each year, HCEEP had to decide how much of its resources to invest in development and how much should go to dissemination. It was a choice between attracting new blood and sustaining old pros in the program.

Finding the optimal relationship between new blood and old pros is a fundamental issue in any demonstration program. If one assumes that a demonstration program should "plant seeds" in local schools by underwriting the initial investment of mounting new programs, then the first projects should muster out of the program to give other schools with other ideas a chance to get the seed money. Three years should be enough time for a federal project to garner local support and get itself written into local budgets. However, if one assumes that a demonstration program should develop effective models, materials, and practical insights in order to disseminate them to other schools, then the first successful projects are an indispensable resource for achieving the program's goal. Turning developers into disseminators is a logical extension of this premise.

The impetus for the decision to fund the first batch of old pros to provide outreach came not from a theory of the demonstration program, but rather from the initiative of the field people who thought they had good ideas and didn't want to lose the support. The HCEEP staff was in a difficult position. There were no objective standards to judge which of the old pros' projects were good and which were not. This was due partly to the state of the art of evaluation in the early 1970s, and partly to the inherent difficulty of pre-specifying explicit standards for measuring the success of exploratory enterprises.

The role of differentiating between effective and ineffective projects was at odds with the role of nurturing a warm, inclusive network of new committed professionals. The HCEEP staff was concerned that the competition and mixed motives resulting from role ambiguity would erode the program's "family atmosphere." Besides, the proposals of neophytes often compared poorly to what

HCEEP knew the old pros could do.³ To compound the problem, the HCEEP staff knew that some good projects would wither away after three years for lack of local support. Not to continue these projects in some form would mean cutting out some children's education, not just directors' jobs.

Because HCEEP's budget continued to expand during this second stage, they would fund most of the old pros in the outreach program and fund developmental projects to bring new blood into the program. As long as the budget grew fast enough, HCEEP did not have to choose between development and dissemination. But the number of old pros graduating to the outreach program grew faster than HCEEP's overall budget.

By mid-decade, competition sharpened for outreach dollars. Each year a new and bigger batch of projects graduated to eligibility for the outreach program. Meanwhile, it was not clear at what time and on what basis outreach projects might be terminated, thus opening places for the new old pros to disseminate. The evaluation issue grew apace the competition. Just as the early demonstration projects had to invent their own ways to educate young handicapped youth, so did the early outreach projects have to invent their own ways of getting other schools to mount new programs.

After several years of experimentation, HCEEP took steps to clarify the nature of outreach and tighten the requirements. HCEEP began to ask for more information about the results of outreach projects, and to require that outreach proposals include an evaluation plan. In 1975 the first six HCEEP projects were validated by the JDRP. Although validation by the Panel was -- and still is -- not a requirement to receive outreach funds,⁴ it did provide a model and impetus to HCEEP to strengthen its evaluation procedures.

³Although this was no doubt true, this comparison of applications raises a basic question. How much of the discrepancy in quality of proposals was related to the capabilities of the applicants to develop new programs, and how much was related to the experience of the applicants with federal grantsmanship? Perhaps a better comparison would have been between the applications for new projects in 1972 with the applications for new projects in 1969. Even so, it is hard to tell whether a new applicant would just "reinvent the wheel" or develop a new idea.

⁴Because HCEEP's legislation explicitly stipulates that dissemination is one of the program's purposes, HCEEP has been allowed to set its own standards for determining what is worth disseminating.

Replicating Models and Stimulating Services

The struggle for evaluation was rooted in conflicting assumptions about what HCEEP's dissemination or outreach strategy should be. Should outreach projects try to replicate models developed by HCEEP's original projects, or should they stimulate services by inducing commitment from schools to educate young handicapped children?

The replication approach to outreach gained support from several sources. HCEEP's regulations refer directly to replication (Federal Register, February 20, 1975). The rationale for replication was reinforced in HCEEP through its interaction with the JDRP. Once the key components of a model have been isolated from a total project for submission to the Panel, the next step in the chain of logic is to get the key components installed as faithfully as possible in other schools. Replication also appealed to those who looked for more objective means of determining which outreach projects were effective.

But replication ran against the view of those who perceived dissemination as less a matter of transferring new technologies than of getting school people committed to serving young handicapped children. Critics of replication argue that to insist that adopters faithfully install pre-existing models would make outreach projects too prescriptive and less responsive to their clients' real needs.

Advocates of the stimulation of services approach to dissemination point out that implementing an HCEEP program usually means not supplanting something old with something new in a school's curriculum, but rather adding something new where nothing has been before. The primary issue for many outreach clients is often whether or not to mount a program for young handicapped children, not which method or model to adopt. Rather than counting adoptions, most HCEEP outreach agents preferred to be evaluated on criteria such as dollar amounts committed by client schools to new services, and number of youth served. HCEEP's use of the term "outreach" for dissemination is significant. It connotes extending the fellowship of the faithful rather than spreading seeds or installing new machinery.

Implementing Law and Marketing Materials

Although replicating models and stimulating services may appear to be polar opposites, most outreach projects have come to see some merit in both approaches and combine aspects of both in their work. This pluralistic approach to dissemination increased as a result of two new influences on HCEEP during its rebirth of the second half of the 1970s. The first influence was the passage of P.L. 94-142, and the second was the marketing initiative fostered by BEH.

Before the Education for All Handicapped Children Law of 1975, most schools were not legally compelled to educate young handicapped children. The motivation to mount special programs had to arise locally from administrative leadership and public advocacy. Much of HCEEP's early outreach work tried to create awareness and induce commitment from school leaders and local constituents to mount special programs. When P.L. 94-142 mandated that the states must educate all handicapped from ages 5 to 21, HCEEP had to rethink its outreach strategy. If one assumed that legal compulsion would do the work of moral persuasion in moving schools to action, then perhaps the role for outreach should focus less on creating awareness and more on helping state and local educators to implement the law.

The implementation of P.L. 94-142 quickly grew to dominate the atmosphere at BEH. Demonstration programs like HCEEP were reviewed in light of the Bureau's new mission. A program review of HCEEP in 1975 proposed "to phase out demonstration project activity gradually, increasing the emphasis on planned installations of validated models and assistance to state agencies; so that by the end of the decade there will be no more new demonstration models funded" (Early Childhood Program Review Memorandum, 1975). This idea assumed that the old pros in outreach projects could provide "planned installation of validated models" as a means of implementing the law. HCEEP opposed this idea with arguments such as:

- P.L. 94-142 dealt only with school-age handicapped children, whereas HCEEP demonstration projects began with children from age 3;
- implementing the law was not the same as generating new knowledge about the best ways to educate young handicapped children; and
- having a law on the books did not obviate the need for awareness activities.

The developmental projects continued, and the outreach projects incorporated the implementation of law into this eclectic approach to dissemination.

The second influence on dissemination in HCEEP was marketing. The Market Linkage program in BEH (discussed below) has influenced HCEEP to approach outreach in marketing terms. HCEEP grantees, for example, are supposed to get their materials to publishers through LINC Resources, Inc. However, the place of marketing in the outreach program is not just as a separate channel for disseminating print materials, but as part of an increasing effort to rationalize and extend outreach activities.

Marketing has reinforced the trend toward an eclectic pragmatism in HCEEP's dissemination strategy. This eclectic pragmatism includes encouraging replication of models without insisting on strict fidelity, stimulating services without being satisfied that just any services will do, helping to implement the law without assuming that legal compulsion alone will produce sufficient awareness and motivation, and marketing materials without assuming that purchased products equal implemented programs. Each outreach project finds a slightly different combination of these four approaches suitable for disseminating HCEEP.

The HCEEP Sub-network in the NDN

The most recent development in HCEEP's dissemination strategy is the sub-network of outreach projects in the NDN. The sub-networking arrangement between HCEEP and the NDN emerged during the winter of 1979-80, just as HCEEP's budget suffered its first reduction. The new "era of limits" was bringing on the fourth and present stage of HCEEP's evolution. The program began looking beyond itself to sustain its momentum and continue to reach for a nationwide impact.

The sub-network grew out of HCEEP's involvement with the JDRP. Of the 29 projects HCEEP submitted to the Panel over 4 years, 25 had been approved. Many of these projects graduated to the outreach program. Although HCEEP had used the JDRP decisions for its own evaluative purposes, the Panel's approval was also a stepping-stone for some projects to the National Diffusion Network.

HCEEP and NDN officials developed a strategy for building linkages systematically at federal and state levels among key participants. They selected a group of outreach projects, State Facilitators, and HCEEP State Implementation Grant (SIG) directors to work out the mechanisms of coordination as a pilot group for the sub-network. Five pilot states were chosen because the prospects for cooperation among the major actors looked promising. While BEH and the NDN coordinated at the federal level, State Facilitators, SIG directors, and HCEEP Developer/Demonstrators coordinated at the state level. Later, other states and other D/Ds became involved, but, with a reorganization and the move to limit the federal role, the process became much less systematic. An informal HCEEP/NDN sub-network remains for several validated and NDN-funded projects.

In summary, HCEEP has evolved over twelve years in four general stages. The outreach program emerged in HCEEP in its second stage in an effort to accommodate both development and dissemination, both new blood and old pros. Evaluation became a critical issue by mid-decade as the ranks of old pros grew faster than HCEEP's budget. Pressure was temporarily reduced by HCEEP's rebirth brought on by P.L. 94-142.

HCEEP's dissemination strategy is an eclectic pragmatism reflecting four strands of influence: replicating models, stimulating services, implementing law, and marketing materials. As the era of limits came upon HCEEP, it established a sub-network of outreach projects in the National Diffusion Network.

CHAPTER VII: THE MARKET LINKAGE PROGRAM OF THE BUREAU OF EDUCATION FOR THE HANDICAPPED

By 1977, when the Market Linkage project began, BEH⁵ had been funding research and demonstration projects for ten years. Most program offices had considerable autonomy within the Bureau and administered their grants with few strings attached. By the mid-1970s, the research studies, project reports, and curriculum products generated from BEH grants were accumulating in inert stacks on the office shelves of BEH bureaucrats. Something wasn't right. BEH had a big mission with a small budget to stimulate and assist schools to educate handicapped youth. Those stacks of materials represented an unused resource for reaching beyond directly funded sites to mainstream American schooling. The dissemination problem in BEH was defined as: How do we get the stuff off the shelves and into the hands of educators?

The marketing initiative in BEH was prompted by three coincident events. The first was the passage of P.L. 94-142 in November, 1975. The dominant federal strategy for getting schools to educate handicapped children had shifted from the persuasion of a social movement to the compulsion of a federal law. P.L. 94-142 suddenly had created a new "demand" in schools for materials that could be "supplied" by the projects BEH had funded over the years. The dissemination problem was framed by the economic metaphor of relating supply to demand.

The second event was a Cresap, McCormick and Paget study of 1975, commissioned by the Assistant Secretary's Office (ASE/HEW). This study was charged to review dissemination activities in NIE and USOE, and to recommend ways of coordinating those activities across the Education Division. If BEH had its own dissemination program up and running, there would be less chance of dissemination being coordinated out of its hands. The third event was a study by the General Accounting Office (GAO) of BEH's Division of Personnel Preparation. The GAO admonished BEH that "the failure to share the results of developmental projects is particularly disastrous in such relatively small fields as special education where resources are limited and the lack of a mass audience discourages commercial initiative." It was time for BEH to do something about dissemination.

In 1975, a dissemination task force was formed to propose a plan for a bureau-wide marketing unit. Wanting to avoid "cumbersome in-house mechanisms," the plan was designed to maximize

⁵BEH stands for the Bureau of the Education for the Handicapped. It was one of the major bureaus in USOE. When the Department of Education was created in 1980, BEH became the Office of Special Education (OSE). In this report, we will use the term BEH because most of the activity it analyzes occurred when the name "BEH" was common parlance.

participation of the private sector and utilize BEH staff primarily for the purposes of management and coordination. Although many operational features of the Task Force plan were later revised, the Market Linkage Project that grew from it embodied three strategic principles from that plan. The first was that major operations should be contracted outside the Bureau. The second principle was that private publishers and distributors should be engaged as much as possible to produce and disseminate BEH materials. The third principle was that, although each product should be disseminated by the system most suited to it, and although marketing was only one of several options for dissemination, the maximum number of BEH products was to be routed through a commercial marketing system.

In 1977, BEH contracted with LINC Resources, Inc. of Columbus, Ohio for about \$250,000 to facilitate the publication and distribution of special education materials developed with support from BEH. LINC set up a five-step process for getting BEH materials to market:

1. LINC prepares a profile on each product it receives from BEH.
2. A Marketing Task Force reviews each product for suitability for commercial publication.⁶
3. Products approved by the Task Force are announced to all publishers through a Product Alert. Products not approved may be referred to the developer and/or LINC for revision and re-submission.
4. LINC negotiates a license for each product with the publisher that makes the best offer, and then puts the publisher in touch with the developer.
5. LINC monitors the publication and distribution efforts of the publishers, and reports to BEH.

In its first two years, LINC negotiated licenses for 29 BEH products with 18 private publishers. The publishers spent just over \$1 million on about 1 million direct mail and catalogue advertisements to market these products in schools. Meanwhile, the government spent about \$625,000 in two years to facilitate this effort through LINC.

⁶This is the marketing analogue to the JDRP. Although the Task Force has some concern for educational effectiveness, it places greater emphasis on whether the product will sell well enough to attract a publisher's interest. There is some tension between BEH, which would like as many products as possible to pass the muster of the Task Force, and some Task Force members, who are concerned to maintain the credibility of the publishers for their decisions.

The basic strategy of the Market Linkage Project is to take the products developed through BEH grants, adapt and screen them for commercial marketability, and license private publishers to produce and distribute them to schools.

This strategy is based on four assumptions. One is that there are basically two kinds of instructional materials: those that require in-person training and staff development before teachers can use them effectively, and those that are "self-teaching" and do not require in-person assistance; the Market Linkage Project is designed to disseminate the second kind. The second assumption is that private publishers can disseminate government-funded products more efficiently and effectively than the government. This assumption is related to the growing belief in the power of large-scale, mail order advertising, and in the efficacy of the profit motive within a competitive marketplace to achieve socially desirable goals. The social goal in this case is disseminating curricular materials for educating handicapped children.

The third assumption is that if the government, acting through an intermediary, prepares its products for mail order dissemination, and promotes them actively and fairly among the publishers, the publishers will realize the profitability of marketing these products and enter licensing agreements to take them on. Because the publishers' objective is limited to securing purchases of products, the private marketing strategy for dissemination makes a fourth assumption that schools will use what they purchase. If the goal of dissemination is to get new curricular products and practices implemented and utilized in the schools, then the marketing strategy for dissemination must assume that if a school buys a product, the appropriate teachers will find it, learn about it, and use it in their classrooms. Because of its reliance on private publishers and distributors, the marketing strategy for dissemination is completed with the purchase of a product. The low per-unit cost of BEH products has not allowed profit-making companies to provide their customers with training or follow-up assistance related to the materials they buy.

The Market Linkage Project disseminates two kinds of instructional materials. One kind is for special educators to use with handicapped children. The other is for regular teachers to use in changing the attitudes of regular children toward handicapped children in mainstream school settings.⁷ The majority of the materials going to the traditional users of special education products are based on a behavioral pedagogy that focuses on discrete learning operations. It is easier to assume that special educators who are trained in behavioral pedagogy are able to implement new practices from printed materials alone than it is to

⁷They also disseminate general information materials that do not have direct classroom applications. These include conference proceedings, research reports, P.L. 94-142 information for administrators, and similar materials.

assume that regular teachers are able to implement new methods for changing attitudes in regular classrooms from printed materials alone. As one moves from behavioral to attitudinal pedagogy, and from special educators to mainstream teachers in targeting potential consumers, it appears that the degree of reliance one can place on the self-teaching capacity of printed materials diminishes.

The Market Linkage Project has played an important role in changes to the management structure within BEH and among new developers funded by BEH. Marketing has received the direct and visible support of the top leadership of BEH. On the other hand, the one-person office that runs the project is located under the Division of Media Services.⁸ This is one of four Divisions in BEH, each of which has operated traditionally on a semi-autonomous basis. The Market Linkage Project has no formal power to constrain other programs to submit their products for marketing review. The project works only when individual project officers take responsibility for bringing the products of their grantees to the attention of the Market Linkage Office. The "front office" at BEH has required that (1) all products resulting from BEH grants must be reviewed for marketability, and that (2) developers have to go through the Market Linkage Project to get their products published and distributed. To coordinate the marketing function across programs and divisions in BEH, central administrators have had to reduce some of the autonomy that individual program offices have enjoyed in the past.

The Market Linkage Project has begun to assist new BEH grantees in organizing their projects so they end up with marketable products. In its first years of operation, LINC had to make extensive alterations on products that had been developed by special educators who had only faint impressions of what makes an educational product marketable. After they worked through the "backlog" of unpublished BEH products, LINC has begun giving workshops to new BEH grantees to make them aware of the practical steps required to produce materials that are marketable via private publishers. Much will depend on the willingness of project officers to stress that developers orient their work toward tangible, marketable results. This requires a tighter style of project management than BEH has traditionally employed. In an age of management-by-objectives, it makes good sense to the rational manager that developers should focus more explicitly on tangible and marketable outcomes. However, true believers are reluctant to make the commercial marketability of a product the major focus and criterion for judging the productivity and ultimate value of developmental efforts.

⁸As of late 1982, things were considerably improved, with the establishment of a new division of Educational Marketing and Technology, staffed by several professionals and the original director, funded for several million dollars, and with a more formalized linkage to funded projects.

The Market Linkage Project works to the extent that it enables each of three stakeholders to get something it wants from the other two. The three stakeholders are developers, publishers, and BEH. Ideally, the developers get production and distribution for their materials from the publishers, and the publishers get new products to market from the developers. Each gains access to the other through LINC. BEH gets to carry out its dissemination responsibility at relatively low cost and through a specialized intermediary operating outside the agency. The key to the success of this strategy is whether LINC can coach enough developers in preparing their materials for market, and attract enough publishers by the profitability of marketing them.

This triangle of stakeholders works through LINC like marriage arrangements work in many traditional societies. The developers have a dowry of materials, to which the publishers bring the promise of widespread dissemination. LINC is the matchmaker who provides a context for the two parties to interact. As in traditional societies, the developers have relatively little to say about their partners. The government is eager for good matches. After all, it holds the copyrights on the dowries. This is a patrilocal system in which the materials are domiciled with the publishers for as long as they sell. In exchange, 75% of the royalties go to the U.S. Treasury, and 25% are returned to the developer's institution. The ultimate test of the match is the quantity and quality of the progeny produced.

CHAPTER VIII: TITLE VII AND THE NATIONAL BILINGUAL NETWORK

Congress passed ESEA Title VII -- the Bilingual Education Act -- as part of the Great Society legislation of 1968. Its basic strategy was to fund local schools to develop new ways of teaching children with limited English proficiency (LEP). These new ways of teaching involved using the native languages of LEP children to teach academic skills until they could function in English, and to preserve facility in their mother tongue and native culture as they assimilate into American schools. The first approach is generally called transition; the second is referred to as maintenance. Either way, bilingual education meant a fundamental change in the way our schools instruct and assimilate newcomers to American society. Bilingual education took on one of the most powerful and volatile metaphors in American culture -- the melting pot. It challenged prevailing social and educational values about how to melt, and how much to melt new ethnic groups into the American pot. Getting schools to implement a new approach to the melting pot meant not only developing new instructional practices, but also changing long-standing cultural norms. It was inevitable that ESEA Title VII would become one of the federal government's most controversial educational programs.

During the last fifteen years, federal initiatives in controversial areas have often taken the form of demonstration programs. A social problem generates a political movement whose leaders convince legislators to respond to their problem. Their Congressional supporters, however, face three difficulties: a limited budget, uncertainty about what will actually solve the problem, and uncertainty about the political support for direct federal involvement in solving the problem. To respond to the social problem despite these difficulties, the Congress may create a small demonstration program that funds local agencies to develop and explore new ways of solving the problem. If the program can demonstrate what actually does solve the problem, and if it can build a constituency that supports the use of that solution in local agencies throughout the nation, then the program can expand and consolidate itself in the federal system.

Bilingual education began in 1969 as a little program with a big mission. To get bilingual instruction into American schools, Title VII had to demonstrate that teaching LEP students bilingually actually works, and then convince leading educators and policymakers to endorse and adopt it throughout the nation. The first part of this task is basically development; the second is dissemination.

History, however, rarely works so neatly. Looking back over the years of Title VII, one can discern two stages in the evolution of its basic strategy. In its first five years, Title VII strategy was to make grants to local schools to mount programs that demonstrated how LEP children could be taught bilingually. Ultimately, when it became clear that there was a lack of trained teachers, suitable materials, and experienced administrators,

policymakers in Washington concluded that although federal seed money was necessary, it was not sufficient to enable local schools to establish new programs that created innovative models for educating LEP children.

With the Amendments of 1974, Title VII expanded the number of local projects while building an infrastructure of support services to help them overcome deficiencies in training, materials, and management. The first centers of the National Bilingual Network (NBN) were established in 1975 as part of this strategy. They included Materials Development Centers, Training Resource Centers, Dissemination and Assessment Centers, and later a National Clearinghouse for Bilingual Education. By 1980, there were 43 centers in the NBN, funded at about \$18 million a year, or about one tenth of the total Title VII budget.

Although the new strategy did not expect local projects to produce new models "for export" to other schools, it still obliged them to set up and run good programs for their own LEP students. But how could local schools overcome their persisting deficiencies in training, materials, and management? The earlier assumption that, given the infusion of outside funds, inventive educators could pull bilingual programs up by their bootstraps gave way to the new assumption that a corps of professional developers and trainers, based in centers throughout the country, could inject local projects with the training, materials, and technical assistance they needed to improve their bilingual programs.

This shift in assumptions was part of a larger realization that introducing such a major change in so many American schools takes more than new classroom techniques developed by a few pioneering practitioners. The problem had to be addressed from several angles at once. Solution components included:

- training new teachers
- providing inservice training for current teachers and aides
- developing classroom materials and distributing them to local schools
- devising diagnostic tests and evaluation instruments
- establishing professional associations
- setting state certification requirements
- starting newsletters and journals
- convening national conferences and regional meetings
- opening a clearinghouse with hot lines and bibliographic retrieval services

- creating new positions for bilingual specialists in state and local education agencies
- organizing parent groups
- building a national research agenda
- supporting new faculty positions in schools of education
- establishing fellowships and awards for talented minority students
- creating linkages with those involved in efforts such as bilingual-vocational and bilingual-handicapped education.

All these activities became parts of the supportive infrastructure for local bilingual programs.

Getting schools to teach LEP children bilingually entails changes at all levels of the American education system. Underlying these changes must be a solid and practical knowledge base that demonstrates that teaching LEP children bilingually is better. The second stage of the Title VII strategy involved building that knowledge base and getting it into practice. The centers of the NBN were designed to play a major role in the overall profession-building mission of Title VII.

The original plan for the National Bilingual Network rested on two assumptions. The first was that there were people around who already knew how to train bilingual teachers, assess their needs for materials, design and develop bilingual materials from scratch, and disseminate those materials so they got used in classrooms. However, because an adequate number of these people did not exist, the "tooling up" process in these centers took longer than initially expected. As with the first local development projects, it involved trying to do something new to find out what it really takes to do it. In addition, coordination was difficult because the centers were geographically scattered, functionally specialized, competing for funds every three years, and staffed by people from different ethnic and linguistic backgrounds. The second assumption was that a group of centers could coordinate themselves sufficiently to make this production line work. The system was designed to require more internal coordination than it could produce. There was no central governing mechanism; nor did the federal program office exert active leadership. No center was authorized to tell another what it should or should not do.

The dispersed nature of the NBN reflects a general tendency in Title VII to spread its resources widely in order to draw many groups into the program. There was great pressure, for example, to give each linguistic group its own materials development

center. Activists from different regions and dialects within the same ethnic group insisted that materials had to be specially tailored for their students. Up to a point, dispersing resources does build a national constituency for a federal program. However, dispersed yet interdependent organizations are hard to coordinate. This had important implications for dissemination.

Dissemination in Title VII has little to do with diffusing model practices as such, but a lot to do with marketing the curricular materials developed by NBN centers. The dominant strategy for dissemination is marketing printed curricular materials by catalogues and direct mail. The materials developed by NBN centers are presumed to be self-explanatory to the bilingual teachers who order and use them. They are usually new materials designed for standard classroom use, rather than new practices that require major changes in the way classrooms operate. Because so few bilingual materials were available at first, dissemination has been seen by the NBN as getting the materials ready for purchase, rather than convincing teachers to abandon one set of materials or practices for another. The underlying assumption is that a person-free, mail order marketing approach is sufficient to disseminate materials that schools adopt as something in addition to, rather than instead of, materials they already use.

The decision to locate development and marketing in separate centers created some coordination problems; specifically, those involved in designing materials need to keep marketing considerations in mind, and those responsible for marketing need to be aware of the developer's view of the materials. In the same vein, the decision to house the personnel who develop and market materials separately from those who work directly with teachers created a related set of coordination problems. Those who work with teachers who have not studied bilingual problems have an understanding that needs to be part of the perspective of those who are developing and marketing materials; while those who developed the materials have achieved a way of thinking about substantive problems that needs to be part of the perspective of those who work with teachers.

While NBN personnel work to increase their effectiveness in addressing these coordination problems, the future of NBN centers awaits a new definition of the federal role in bilingual education. The political and budgetary constraints of the 1980s probably will initiate a third stage in the evolution of Title VII strategy. While a new strategy has not yet emerged, the policy environment that will shape it probably will contain the following five constraints:

- Pressure for consolidation. Bilingual education escaped the first round of Reagan's consolidation of federal education programs. However, the forces

behind a "New Federalism" are still in the ascent. There will be strong pressure to make bilingual education more a matter for the states. Because Title VII has kept most of its eggs in the federal basket, it has not established strong centers of advocacy in most state education agencies. Historically, activists in the bilingual education movement have perceived the states as recalcitrant to the cause. Although this perception has changed as a result of greater involvement by many states in bilingual education, Title VII is still politically vulnerable in most state agencies. It is not likely that many states will fill the void created by the receding role of the federal government in bilingual education.

- Less prescriptive regulations. The withdrawal of the proposed Lau regulations in February 1981 was the low point of federal efforts to get local schools to teach LEP students bilingually. The implicit message behind the withdrawal of the Lau regulations is that there is no one best way to educate LEP children. Twelve years of demonstration projects did not produce a "model" on which the federal government could base specific guidelines for bilingual education for all American schools.

The new regulations for both Title VII and the Office for Civil Rights (OCR) will give greater freedom -- and thus greater responsibility -- to local districts to decide which methods work best for which children under which circumstances. The federal government will have fewer monetary incentives through Title VII, and weaker legal sanctions through OCR to promote bilingual education. The issue for local schools will not be compliance with federal regulations, but finding the most cost-effective way to educate the LEP children on their rolls.

To the extent that there is local commitment to bilingual education, the demand for technical assistance and inservice training may increase. If the NBN centers remain focused primarily on serving local Title VII projects, they will diminish -- and perhaps disappear -- within a few years. However, the NBN centers may have a future if they can adjust their capabilities to meet the needs of the growing number of school districts that are left on their own to find an effective way to educate their LEP children.

- The decline of maintenance and the rise of ESL. The principle of using bilingual education to maintain non-English languages and cultures has become politically untenable. The area of pedagogical dispute will not be between transition and maintenance, but between transition and English as a Second Language (ESL). With less federal support for pull-out classes, bilingual aides, and second language materials, most local schools will probably try to mainstream their LEP children as quickly as they can. Bilingual education will be used more directly as the educational instrument of the melting pot.
- Continuing needs to educate LEP children. The receding federal involvement in educating LEP children will not mean that the problems also will recede. In fact, the number of LEP children may grow. The Hispanic population, which accounts for about 80% of all LEP children in American schools, probably will surpass the Black population by the next census. This is because of high birth rates among Hispanic-Americans and a steady flow of immigrants, legal and illegal, from Mexico and Central America. Given the close social and economic ties that cross the Rio Grande, improving bilingual education in the United States may be seen as an important aspect of improving US-Mexican relations. For both economic and security reasons, the United States will become increasingly involved with Third World nations that will grow more populous and less stable in the years ahead. Unless the new immigration policy bars American doors to more refugees, one can assume that the Vietnamese, Cubans, and Haitians that have recently arrived on our shores and shown up in our schools will be followed by similar groups in the future. Bilingual education is one of the increasing number of domestic policy areas which impinge upon our relations with other nations.

These are the general constraints under which the federal role in bilingual education will be redefined. That redefinition probably will constitute the third stage in the evolution of the Title VII strategy. When it comes, that strategy will reassess the place of the NBN centers in the overall program.

There appear to be three basic options for that reassessment. One is to return to funding local projects only, as in the first stage of Title VII, letting the NBN centers wither away entirely. A second option is to sustain roughly the same ratio of local projects to infrastructural support by cutting both at an equal rate. The third option is to cut local projects and recast the

federal role in bilingual education as improving -- probably restructuring -- the infrastructure of support services, including technical assistance and dissemination, to locally initiated programs for educating LEP children.

When all is said and done, however, the future of the National Bilingual Network and all of Title VII, will turn on how policymakers answer two questions: How should LEP children be taught? And, what should be the federal role in improving the way schools educate these children?

CHAPTER IX: THE BASIC SKILLS IMPROVEMENT PROGRAM

Since the Basic Skills Improvement Program (BSIP) has been consolidated, it will now exist in a manner determined by individual states. It began its four year life-span in 1978 as the legislative reincarnation of Right-to-Read. One dominant feature of the policy environment in which the \$26 million program was recast was the pervasive movement to turn education "back to the basics." By 1978, for example, many states had passed laws requiring schools to test for minimum competencies in basic skills. Most federal programs, however, focused either on assuring equal opportunity for special needs and minority group children, or on supporting innovation in areas not usually considered "basic." Reconstituting Right-to-Read as the Basic Skills Improvement Program (ESEA Title II) was a way for the federal government to project a leadership role in a "grass roots" movement that already had enveloped much of American education.

The vehicle for projecting that belated leadership role was a demonstration program. BSIP's essential strategy was to make grants to schools and adult learning centers to improve their instruction in basic skills. Although this was similar to what Right-to-Read had done, BSIP explicitly stressed that grantees were expected to develop practical models and publishable materials for dissemination beyond their own settings. To facilitate the achievement of this goal, BSIP provided several kinds of technical assistance to their grantees (in a structure patterned on the National Diffusion Network). A national consortium of five centers helped BSIP projects to develop and evaluate their programs. Another agency helped them prepare submissions to the JDRP, while still another helped them get their materials produced and distributed by private publishers. BSIP modeled its relationships to private publishers on LINC's program of Market Linkage for the Office of Special Education. Indeed, LINC is the contractor for BSIP marketing programs.

Because improving basic skills instruction is the concern of many federal programs, BSIP was intended by Congress not only to develop and disseminate its own local programs, but also to coordinate the efforts of other federal programs in making basic skills a new agency-wide emphasis. BSIP houses the Steering Committee for Basic Skills Coordination, with its director serving as the committee's permanent chairperson. The idea behind the Steering Committee was to make the federal categorical system more responsive to efforts by state and local agencies to coordinate different federal programs around the theme of basic skills. SEAs, which had a strong role in the Right-to-Read program, got broad discretion over a considerable portion of BSIP funds. As in Right-to-Read, the BSIP legislation gives partial responsibility for dissemination to SEAs. Meanwhile, technical assistance contractors are expected to help local basic skills projects funded by a variety of federal programs to prepare for dissemination. In addition, BSIP was placed in the short-lived Bureau of School Improvement, which planned -- among other things -- to establish a dissemination unit that would serve all the

programs in it. These federal efforts to coordinate categorical programs around a basic skills emphasis now appear in retrospect to have been belated attempts by reformers inside the bureaucracy to loosen the constraints of the categorical system, and thus forestall the more radical measure of consolidation that has come from outside the bureaucracy.

The most unique feature of the BSIP dissemination strategy is its combination of diffusion and marketing. This dual strategy assumes that the two are complementary rather than competitive approaches to educational dissemination. Projects that show overall promise are helped to get approved by the JDRP. Their models can then be diffused as a total practice by the NDN or a similar mechanism that helps schools adopt and implement new programs. Projects that develop free-standing materials are helped to get them produced and distributed by private publishers. The route through the private sector appears to be a cost-effective means of disseminating educational materials that do not require in-person assistance before they can be used in classrooms as intended by the developers. In BSIP's dissemination strategy, the medium can be chosen to suit the message. Having several channels for dissemination also gives developers greater flexibility in producing something for dissemination. In addition, it offers the federal program several alternatives for getting the results of its initial investments into widespread circulation.

BSIP's two approaches to dissemination have been operating on virtually separate tracks. Models for replication go through the JDRP; materials for publication go through LINC. This is an improvement over the "either/or" approach of many federal programs. However, BSIP's "both/and" approach might be more effective if diffusion and marketing were integrated in a way that used the advantages of both strategies. Materials detached from the settings in which they were developed tend to lose their potency by the time a school district orders them from a catalogue, the materials arrive in a box, and teachers open it up and read the instructions. On the other hand, most model programs use special printed materials as part of their classroom practices. In a few cases, private companies have published materials related to model programs diffused through the NDN. Having original developers and certified trainers available to provide implementation assistance would probably make publishers more interested in entering licensing agreements to publish materials developed with federal support. On the other hand, having publishers advertise and market materials based on validated practices may promote widespread awareness of these state-of-the-art practices among educators. This kind of integrated relationship between diffusion and marketing could enhance the power of dissemination to support school improvement.

Cooperative relationships between the public and private sectors are riddled with legal complications. In the past, these complications have put off people on both sides who would

otherwise have been motivated to make it happen. However, many of these legal complications have been worked out by LINC Resources in their go-between role linking federal programs like BSIP to private publishers. This has set the stage for broader complementary relationships between the federal government and private publishers in educational dissemination.

Plotting a new relationship between the public and private sectors in educational dissemination appears reasonable in light of the receding role of the federal government in school improvement. It is also compatible with the approach of the new administration, which believes that the engines of change in social institutions should be fueled by private entrepreneurship. Yet the federal government has the role of addressing social needs that cannot be met on a profit-making basis. Perhaps there are dissemination strategies that can span the boundary between public and private sectors, and be more cost-effective for it.

Traditionally, dissemination has been tied to specific programs because the legislative authority for it has been tied to specific programs. This has been the major source of "turf strength" for individual programs over generic administrative functions like dissemination. It has also meant that the dissemination capabilities in the federal bureaucracy rise and fall with the fortunes of individual programs. If the future federal role in school improvement is to include dissemination, and if dissemination is viewed as a generic administrative function rather than a program-specific function, then it would appear reasonable to establish a place in the Department of Education or its successor that manages dissemination as a generic activity cutting across individual programs.

CHAPTER X: ISSUES AND RECOMMENDATIONS FOR POLICYMAKERS

In the previous chapters, we reviewed nine educational activities: the Joint Dissemination Review Panel plus eight programs that have developed and implemented dissemination strategies. We described each activity in detail, explaining how the policy decisions were affected by social events, by political factors, and by the direct experience of those who played a role in these activities.

In this chapter, we discuss twelve issues that cut across these activities, and we make recommendations about how each of these issues might be dealt with by federal policymakers. The recommendations integrate what we learned in studying each of the nine activities with our experiences in working with many of them.

Why should policymakers heed our recommendations? For one important reason. We believe that the directors of the federal education programs that we reviewed define dissemination as distributing expertise, materials, or practices that have emerged from a developmental process. Since development appears to have emerged with greater emphasis in federal education policy, we are hopeful that policymakers will recognize the crucial role that dissemination ought to play in a comprehensive, development-oriented program. The fruits of federally-supported development can easily go to waste without purposeful, strong dissemination support.

We now turn to a discussion of these issues:

- What should be the criteria for success of school improvement efforts?
- What should be disseminated?
- How should potential disseminates be screened?
- What kinds of incentives should be used to stimulate local districts to consider new practices?
- Are external facilitators necessary?
- What roles can external facilitators usefully perform?
- Who should serve as external facilitators?
- What kinds of support do external facilitators need?
- How can federal and state governments interact productively?
- How can public and private sectors interact productively?
- Should educational dissemination be a generic federal function?
- What kinds of research will help resolve these issues?

Where possible we suggest implications for policy.

What Should be the Criteria for Success of School Improvement Efforts?

Ultimately, the purpose of these various dissemination activities is to improve schools so that all kinds of students learn as much as they can. But the programs reviewed in this volume differ from one another with respect to strategies they have selected to

accomplish this common purpose. Here we focus first on the programs' objectives in selecting a strategy, and then examine the criteria by which they have attempted to measure their success.

The various purposes of the programs can be grouped under three headings: quantitative objectives, qualitative objectives, and issue objectives. By quantitative objectives, we mean that programs are concerned with the size of the impact of their strategy. Two important quantitative objectives are:

- maximizing the number of districts affected
- increasing the extent to which services are provided to targeted student populations.

The pursuit of the quantitative objectives is usually tempered by an image of what should happen in the schools that participate in the program's efforts. Three qualitative objectives that at least some programs seem to want to accomplish are:

- replicating practices
- fostering staff development
- increasing the school's problem-solving capacity.

In addition to trying to accomplish certain objectives in schools, a few programs were interested in tackling a particular issue. Here are two examples of issue objectives:

- involving the private sector. Historically, federal educational programs have relied almost exclusively on the public sector, despite the fact that critics have asserted that the private sector can accomplish certain purposes both better and less expensively than the government. The BEH Market Linkage Program set out to find a useful way to involve the private sector, and the Basic Skills Improvement Program capitalized on the spade-work performed by BEH.
- testing the efficacy of a no-external facilitator strategy. Because relying upon in-person assistance was expensive, one program set out to determine the feasibility of operating an effective dissemination program without relying upon the services of external agents (Title I PIPs).

Figure 1 shows which of the eight dissemination strategies embraced each of the objectives described above. Note that we infer that all programs desire to maximize the number of districts affected, and that five of the eight are concerned with specific student populations.

It is relatively easy to translate quantitative objectives into specific criteria for success. Among those that these programs have used are:

Figure 1: Comparison of Programs with Respect to Their Objectives

	Quantitative Objectives		Qualitative Objectives			Issue Objectives	
	Maximizing the number of districts served	Increasing the services to targeted student populations	Replicating practices	Fostering staff development	Increasing the schools problem-solving capacity	Involving the private sector	Testing the efficacy of a no-linking agent strategy
Title IV-C	•		•	•			
National Diffusion Network	•		•	•	•		
Project Information Packages (pre-NDN)	•	•	•				•
Follow-Through (pre-NDN)	•	•	•	•			
Handicapped Children's Early Education Program	•	•	•	•			
Market Linkage Program for Special Education	•	•				•	
National Bilingual Network	•	•	•	•			
Basic Skills Improvement Program	•	•	•	•		•	

- the number of students served,
- the amount of local funds committed to new services,
- the number of sets of materials purchased, and
- the number of practices adopted.

It is more difficult to translate qualitative objectives into specific criteria. In fact, we are aware of only one qualitative objective for which programs have established criteria. The degree of fidelity, the closeness of the practice to the developer's "ideal" version, has been used to assess replication of practices. So far as we know, none of the programs has established any criteria dealing with either of the other qualitative objectives (i.e., fostering staff development and increasing the school's problem solving capacity).

Figure 2 shows our understandings about which of the eight dissemination strategies were concerned about each of the criteria for success mentioned above. (We do not discuss criteria for the two issue objectives since we devote subsequent sections of this chapter to each of these issues.)

Figure 2: Comparison of Dissemination Strategies with Respect to the Criteria for Success

	Number of students served	Amount of local funds committed to new services	Number of purchases	Number of adoptions	Fidelity of adoptions
Title IV-C				•	•
National Diffusion Network				•	•
Project Information Packages (pre-NDN)			•		•
Follow-Through (pre-NDN)				•	•
Handicapped Children's Early Education Program	•	•		•	
Market Linkage Program for Special Education			•		
National Bilingual Network	•				
Basic Skills Improvement Program			•	•	

What does the issue of success criteria imply for policymaking?
We have five recommendations:

Recommendation 1: Temper quantitative objectives with qualitative objectives.

Using mere numbers to determine success can stimulate much activity, but ensures no ultimate impact. As we discuss later, the one program that set no qualitative objectives appears to have had virtually no impact on classroom instruction in schools.

Recommendation 2: Set criteria for each qualitative objective.

Unless policymakers set criteria for success corresponding to each qualitative objective (e.g., fostering staff development, increasing a school's problem-solving capacity), they can't expect those involved in implementing the dissemination strategy to work toward achieving them.

Recommendation 3: Consider a range of options for qualitative criteria for success.

In the local site component of the study,⁹ we identified several categories of success criteria, including:

- degree of implementation, for which sample criteria are "extent of implementation" (i.e., the extent to which components of the practice are in place), "practice-specific mastery" (i.e., the skillful use of the practice's components as defined by the developer), and "change in practice" (i.e., the extent to which a teacher's current practice is different from what he or she was doing before adoption, in terms of specific components of the practice);
- attitude toward the practice, for which sample criteria are "net evaluation of the practice" (i.e., the teacher's view of the strengths and benefits of the innovation, weighed against its perceived weaknesses and costs), "the practice as a problem solution" (i.e., the degree to which those implementing the innovation view it as a solution to problems with which they have been coping), and "commitment to the practice" (i.e., the degree of pride, ownership, and attention to the practice as a salient aspect of the implementer's situation);

⁹All of these criteria -- plus several more -- are fully examined in Volume II of our report series, Portraits of the Changes, the Players, and the Contexts (Loucks, Cox, Miles, Huberman & Eiseman, 1982).

- impact (on the student, the teacher, classroom organization, and on school-wide organization); and
- continuation and institutionalization, for which sample criteria are "plans for continuation" (i.e., intent to continue or expand the use of the innovation within the building or district), and "institutionalization" (i.e., the presence of structural features that support/ensure continued, routinized use of the practice).

Recommendation 4: Vary the stringency of the qualitative criteria for success by the sophistication of the typical school's existing curriculum in the area of interest.

When the typical school's existing curriculum in the area of interest is non-existent or somewhat primitive (as was the case with HCEEP and the Bilingual Education program), we consider it legitimate to have rather rudimentary, non-stringent qualitative criteria (e.g., the teacher's judgment of the program's benefits). On the other hand, when the typical school already has a coherent program in place (e.g., in reading), then we believe that policymakers interested in improving the program should set more demanding criteria for success (e.g., fidelity).

Note that we are not recommending that any or all of these specific criteria be embraced, but rather that policymakers need to select among options when formulating objectives and setting criteria.

Recommendation 5: Be cautious about insisting that adoptions be faithful, in setting qualitative criteria for success.

Although we are not advocating the abandonment of fidelity as a criterion, we want to emphasize that there are three competing approaches to encouraging schools to experiment with alternative practices and materials that yield the greatest degree of school improvement. These approaches are: insisting that adoptions be faithful, encouraging schools to adapt practices to their local conditions, and involving school staff in problem identification and problem-solving processes.

Because our survey and field studies¹⁰ examined schools where teachers were trying to implement specific practices, we are only in a position to comment on the validity of the first two approaches. According to our findings, the wisdom of insisting upon fidelity (vs. allowing adaptations) depends upon the answers to three questions:

¹⁰In addition to Volume II cited previously, see Volume IV, Innovation Up Close: Field Study of Twelve School Districts (Huberman & Miles, 1982).

- What is the purpose of making the modifications? When the purpose is primarily to decrease the difficulty teachers experience as they attempt to use the innovation, we found that the parts of the practice that were eliminated or modified usually were the parts that contributed the largest amount to the practice's school improvement effect.
- Given the above consideration, is the proposed modification defensible? If someone thoroughly familiar with the practice affirms that the proposed modification is unlikely to reduce the practice's utility, then adapting to local conditions or individual teacher style probably will be appropriate. However, it must be remembered that unless there is a reasonably substantial difference between the teacher's practice before implementation and what the practice requires, we can't expect that the introduction of the new practice will make much difference. In other words, modifying a practice so much that it resembles what a teacher is doing already, although innocuous, may make implementation training and support a sheer waste of resources.
- Are adopting teachers supported with adequate assistance? We discovered that in cases where the discrepancy between the teachers' past practice and the new practice was wide, insisting that teachers implement the practice faithfully only worked when they were given substantial assistance. With large discrepancies (i.e., great expectations for change), coercion without assistance failed. These considerations should influence the setting of fidelity as a success criterion.

What Should be Disseminated?

The "disseminates" of the programs we studied can be grouped into three categories:

- expertise. This category includes knowledge of the results of relevant research or evaluation studies and specialized problem-solving assistance;
- materials. This category includes both curriculum materials and training materials; and
- practices. This category includes "promising practices," (i.e., practices that have been tried and that have the enthusiastic support of those associated with the trial, but that cannot point to data demonstrating that they are effective), and "validated practices" (i.e., practices that have collected data that demonstrate that they are effective).

Figure 3 compares the programs with respect to what is disseminated. Perhaps the most striking fact revealed by the figure is that regardless of what else a program may disseminate, all programs disseminate curriculum materials. Teachers want more than an idea, they want concrete materials to help them implement the idea. Furthermore, according to studies of the PIPs and of the NDN, implementation is more successful when such materials are detailed, describing what to do, how to do it, in what sequence, and why doing it that way is important (Emrick, Peterson & Agarwala-Rogers, 1977; Stearns & Norwood, 1977). This leads us to

Recommendation 6: Disseminate materials, but ensure that the instructions are (a) detailed and (b) accompanied by a clear rationale.

From looking at the two columns on the right in Figure 3, the dissemination strategies can be grouped into three categories: those that disseminate validated practices exclusively (that is, they refrain from disseminating practices unless they have been validated), those that disseminate promising practices (including those that disseminate both kinds of practices, such as HCEEP), and those that do not disseminate practices at all. The Market Linkage Program restricted itself to disseminating materials, and was successful in getting schools to acquire them. However, during our survey of schools that had experimented with new practices or materials, we used the disseminators' lists of school districts that had acquired their materials. We attempted to contact every school district located within our ten sample states (which were distributed throughout the continental U.S.), and were able to find very few teachers who were actually using the materials the district had acquired (Loucks, Bauchner, Crandall, Schmidt, & Eiseman, 1982). On this basis, we offer:

Recommendation 7: When a set of materials constitutes more than a conventional textbook, encourage the development of a replicable practice that demonstrates how teachers can use the materials.

Turning to the two remaining categories -- those that disseminate promising practices and those that disseminate validated practices -- we note that both programs that disseminate promising practices were trying to break new ground (one with handicapped children, and one with bilingual children). Since each was at the early stage of tackling a complex and difficult problem, it had few practices to choose from. Given that the typical school was either ignoring the problem or using band-aid solutions, program officials were committed to involving schools in doing something or doing more than what they had been doing. These programs not only disseminated practices that they had developed but also disseminated various kinds of expertise. Furthermore, as the three left-hand columns in Figure 3 show, they were the only programs to do so.

Figure 3: Comparison of Strategies with Respect to What is Disseminated

	Expertise			Materials		Practices	
	Needs Assessment Assistance	Problem-Solving Assistance	Research or Evaluation Results	Curriculum Materials	Training Materials	Promising Practices	Validated Practices
Title IV-C				•			•
National Diffusion Network				•			•
Project Information Packages (pre-NDN)				•	•		•
Follow-Through (pre-NDN)				•		•	•
Handicapped Children's Early Education Program	•		•	•	•	•	
Market Linkage Program for Special Education				•	•		
National Bilingual Network	•	•	•	•	•	•	
Basic Skills Improvement Program				•	•		•

Note: We believe that the information in this table was accurate at the time our data for each dissemination strategy were collected. However, from time to time, programs revise their strategies. For example, since NDN has recently been directing attention to the preparation of certified trainers, some D/Ds now develop and disseminate training materials (in contrast to what the table shows).

In our opinion, the decisions that these two programs made were valid, but only because they were involved in an early phase of addressing a problem. We can be more specific. With regard to disseminating knowledge, most teachers experience difficulty when presented with information such as research findings in raw form or in the form of abstract implications for action. In general, unless assistance is provided, teachers are unlikely to use such information unless they have access to lesson plans or precisely described activities that demonstrate how it can be used. Therefore, we offer:

Recommendation 8: When aware of worthy but unembedded substantive information, stimulate the development of a replicable practice that demonstrates how teachers can use the information.

With regard to disseminating promising practices, we believe that no one is served by undertaking a major effort to implement a new practice if that practice only appears to be promising but actually fails to achieve its goals. A "validated" practice has a much better chance of working in a new setting than one that has not undergone evaluation. It is therefore incumbent on a program to devote resources to validating the practices that appear promising. Of course, this can be done only when the program has gained experience through funding demonstration projects and analyzing what works and what doesn't. As more projects are evaluated as effective, acquiring a pool of validated practices becomes more possible. Accordingly, we offer:

Recommendation 9: In deciding whether to insist that practices be validated before they are disseminated, take into account the sophistication of the field in coping with the problem of interest.

Often a program cannot wait long for enough demonstration projects to be validated as effective to form a usable pool for dissemination. Sometimes the need is acute. Thus, we offer:

Recommendation 10: In deciding whether to insist that practices be validated before they are disseminated, take into account both the urgency of practitioner need and the extent to which the pool of existing practices fully addresses the need.

Here we do not mean that the practitioner is necessarily the sole judge of the urgency of the need. Since the practitioner may not be particularly motivated to address the needs of such groups as handicapped or bilingual children, there are cases when the most appropriate judge is Congress or state legislators.

Note also that we added another dimension to the decision: the extent to which the pool of existing practices fully addresses the need. If a need can be broken down into aspects, and the pool of practices that are ready to be validated only addresses some of these aspects, it makes sense to allow promising practices that address the remaining aspects to be disseminated for a year or so, while data on their effectiveness are being collected and analyzed. Facets of this idea are echoed in Recommendation 11.

Turning to Figure 3 one final time, we note that some programs disseminate training materials while others do not. Of course some practices are sufficiently straightforward, given the nature of their curriculum materials, so that they don't need a training program; also, a dissemination strategy can have a training component without disseminating training materials. Nevertheless, unless a program that is reasonably complex disseminates training materials, then the developer may be the only person capable of providing training in the practice. This reasoning leads to

Recommendation 11: When a practice or set of materials is complicated, stimulate the development of replicable training procedures, preferably with supporting materials.

How Should Potential Practices or Materials be Screened for Dissemination?

The best known mechanism for screening practices and materials is the JDRP; however, program officers frequently conduct their own initial screening, sending on to the Panel only those that appear to be viable candidates. Furthermore, not all programs use the Panel, or use it exclusively. For example, practices and materials developed with Title IV-C funds are often screened by state-based versions of the JDRP, although some are sent directly to the federal panel. Similarly, HCEEP uses the JDRP for some of their practices, but uses an alternative mechanism for others.

An important feature of the JDRP is that it has -- or strives to have -- one standard. For some, this is a virtue; for others it can be a problem. The argument for having a single standard is intuitively self-evident. One way that it can be problematic relates back to our discussion of disseminating promising practices. We believe that during the early phase of addressing a tough problem -- when schools don't know what to try -- it seems both reasonable and responsive to send schools promising practices despite the fact that their effectiveness has not yet been established, provided that they meet some yet-to-be determined minimal standards.

What might these minimal standards be? Among the questions we believe should be answered affirmatively are: Are the objectives clear? Do the learning activities appear to be logically related to the accomplishment of the objectives? Does this practice

either serve a student population, aim toward an objective, or use an instructional approach that is sufficiently different from that served, aimed toward, or used by another already validated practice? Even if the answer to this last, multi-part question is "no," if the developer of the promising practice is available to assist with the practice's dissemination, it may make sense to ask whether he or she will be able to serve a region of the country that is currently not being adequately served by developers of validated practices. Perhaps the most fundamental question is: From everything that is known about the practice, is the likelihood high that its developers will eventually be able to demonstrate its effectiveness?

From the above, we offer:

Recommendation 12: Screen promising practices to ensure that they are coherent, intuitively sound, and needed.

Given that screening should occur, who should do it? We believe that allowing individual programs to set their own standards or to operate their own screening mechanism puts program personnel in a conflict-of-interest position. Furthermore, a screening mechanism that is independent of dissemination programs is more credible. Thus even if there is to be more than one standard, we believe screening mechanisms -- that is, one mechanism for screening practices that are ready to be "validated" and one for screening those that have not yet ready -- ought to operate out of one office. Accordingly, we offer:

Recommendation 13: Establish a centralized unit that is responsible for screening disseminates.

We should add that the JDRP's procedure of gathering panel members from various constituencies on an ad hoc basis appears to be a good model.

What Kind of Incentives Should Be Used to Stimulate Local Districts to Consider New Practices?

To shed light on this question, let us first suggest three primary reasons why districts adopt practices:

- to receive funding. School people often look to government-supported dissemination programs to infuse their schools with resources they would not otherwise have.
- to comply with mandates. Federal and state mandates exist (or have existed) that are concerned with the education of special groups such as bilingual and handicapped children.

- to improve classroom practice. Educators can be motivated to improve their schools either because they feel pushed into coping with a gnawing problem, or because they feel pulled by the lure of a practice that may do an even better job than the one that is currently in place.

To be sure, other motives exist. Individual teachers or administrators wish to assure community members that their children are receiving the best possible education, to keep abreast of current developments, to collect data for a dissertation to advance one's career, or to fulfill some other idiosyncratic desire. Nevertheless, one or more of the three motives listed above is probably always present. Figure 4 shows which programs tend to tap which of these motives. Note that the first two motives can be categorized as extrinsic and the third as intrinsic. Federal programs can offer incentives that harness the extrinsic motives; they can only indirectly harness intrinsic motives. Note that most programs rely at least in part on extrinsic motives, while only a few rely solely on intrinsic motives.

Traditionally, incentives are divided into "carrots" (e.g., funding) and "sticks" (e.g., mandates). With regards to carrots, programs may offer to subsidize all or part of the implementation phase of a project, under the condition that the district agree to pick up the extra costs of maintaining the project after the funding period. However, if the maintenance costs are non-trivial, this approach probably can be described as "fine in theory, but . . .," especially under current economic conditions. Accordingly,

Recommendation 14: Refrain from disseminating practices that cost substantially more to operate after implementation than the practices they replace; if possible, design and validate less expensive versions.

On the other hand, if regular operational costs are affordable, it makes sense for programs to subsidize all or part of the implementation phase. There are two major options: to grant all the money to the district (as PIPs did during their early experimental years) or to channel all the money to the disseminators (as NDN does). But it doesn't have to be either-or. Since districts incur start-up costs, and since disseminators cannot operate without funds, the model used by Title IV-C adopter grants may be optimum. Specifically, disseminators are fully funded (i.e., by NDN or state monies), but districts are also provided nominal support -- \$5,000 to \$10,000 -- if they want to adopt a sponsored practice. In most cases, the value of the extra teacher time and commitment far exceeds the federal contribution. As a result, the federal contribution constitutes more of a symbolic expression that implementing new practices requires effort above and beyond normal job

Figure 4: Comparison of Dissemination Strategies with Respect to the Motives for Users that They Harness

	To receive funding	To comply with a mandate	To ameliorate a problem or to improve practice
Title IV-C	•		•
National Diffusion Network			•
Project Information Packages (pre-NDN)	•		•
Follow-Through (pre-NDN)			•
Handicapped Children's Early Education Program			•
Market Linkage Program for Special Education		•	•
National Bilingual Network		•	•
Basic Skills Improvement Program		•	•

responsibilities than compensation for extra expenses incurred. Given current economic realities, and given the apparent willingness of teachers to respond positively to symbolic incentives, we suggest,

Recommendation 15: Fund disseminators fully and, when possible, provide adopting schools with nominal/symbolic dissemination assistance grants.

Given that our position with regard to carrots is "only offer small carrots, but do that whenever possible," what is our position with respect to the stick? As usual, there are two sides to the question. On one side is the moral argument, which sometimes even has a constitutional basis (e.g., the courts' mandates to redress inequities in opportunity caused by racial discrimination). It is difficult to quarrel with the conclusion that some kind of action was required to improve the educational opportunities of children who are handicapped or whose first language is other than English.

But the other side of the question is also compelling: governments at both the federal and state level have placed schools in an impossible position by requiring them to perform new and costly services without providing the funds to pay for these services. And in several states the voters have reacted to this and other phenomena by imposing limits on the amount of taxes local districts can levy. Clearly, one factor in Reagan's decisive victory over Carter was his opposition to federal intrusion in state and local matters.

In brief, we believe that even when mandated requirements achieve their objectives, they usually also incur resentment which ultimately results in a backlash.

Furthermore, while we are aware that it is the legislative rather than the executive branch that creates mandates, we believe that bureau personnel can influence the course of legislation. These thoughts lead us to:

Recommendation 16: Urge Congress to refrain from mandating that schools act in certain ways unless (a) the moral justification for establishing such mandates is especially compelling, (b) developmental efforts have yielded replicable practices that address the problem at hand, and (c) the more palatable alternative of offering both incentives and assistance has been tried for at least three years without satisfactory results.

Are External Facilitators Necessary?

We have already described the experiences of two programs that bear on this question. The market linkage strategy of BEH uses individuals outside school districts, in their case publishers' representatives, to disseminate locally made materials. Their role is confined to inducing someone in a school to purchase the materials they are disseminating. It was for this strategy that we had problems locating teachers for our local site sample. We found we had to check out a great many districts that had purchased the materials before finding any teachers who were using them.

The other strategy bearing on this question involved funding districts to try out a PIP for two years, with the second year of funding contingent on the recipients of the PIPs (a) implementing the practice without the assistance of anyone familiar with it, and (b) implementing it faithfully. As we reported in our history of the PIPs, the teachers were able to implement the practice faithfully without external facilitators, but (a) they experienced a strong urge to interact with others knowledgeable about the practice, and (b) they indicated that they would not have exerted the effort to implement the practice faithfully without human support had the second year of funding not depended upon it.

On the basis of the above, there may be reason to conclude that external facilitators are not necessary, provided either (a) the program is only disseminating materials and doesn't care whether the recipients actually use them, (b) the program is disseminating practices but doesn't care whether the adopters implement them faithfully, or (c) the program is disseminating practices and is willing and able to both offer a carrot and threaten to withdraw it to induce the adopters to implement the practices faithfully.

We question the wisdom of establishing a policy that does any of these. First, we consider it unconscionable to adopt a strategy of distributing materials when a study of that strategy has struggled to locate purchasers who have actually used the materials. Second, we assume that if a practice that is effective is selected for adoption, fidelity to its core components is important to ensure the same impact at the new site. A program that doesn't care about fidelity runs the risk of having no effect at all on schools and classrooms. Finally, we counsel against offering a carrot and then threatening to withdraw it, since school people resent being treated that way. As a result of our analysis, we propose:

Recommendation 17: Unless the practices or materials to be disseminated are no more complex than conventional textbooks, plan to use external facilitators.

What Roles Can External Facilitators Usefully Perform?

To discuss the roles that external facilitators might perform, let us examine the assumptions underlying the various federal strategies. It appears that each of the following is assumed to be needed by at least one of the strategies:

- assistance in making choices. Potential adopters face two kinds of choices. The first is whether or not to experiment with an innovative practice, and the second is which practice to try. (Although these choices can be separated for purposes of analysis, in practice, they are often inseparable.) In order to make an informed decision about whether or not to adopt, potential adopters need to know, among other things, how much time and effort implementing the practice will require, and how long it will take before using the practice is a matter of routine. If the disseminate were a product like a cereal box, then the requisite information could be printed on the label. But when it is a complex practice, there are no universal answers. Rather, the time and effort required to implement a particular practice depends upon such factors as the teacher's background, the teacher's capacity to profit from training, the teacher's current practice (the greater the magnitude of the required change, the more time and effort needed to implement the practice), and the conditions in the school. Not surprisingly, these same factors determine how long it takes before using the practice becomes a matter of routine.

Making a choice from among options requires that more than one option exists. But if several practices seem to have been developed to help achieve the same goal, then not only must the factors mentioned above be taken into account, but also such factors as the nature of the student populations and the compatibility of the practice's pedagogical assumptions with those embraced by the school.

Some programs actively seek to help potential adopters make choices not solely because the decision-making process is complex and involves self-assessment (which is difficult to engage in without the aid of an objective outsider). Specifically, when policymakers assume that a practice will only reproduce the developer's results if it is replicated faithfully under conditions that are similar to those that were present in the developer's school, then it follows that potential adopters need help determining whether the conditions in their school are suitable to adopt a practice that intrigues them.

- curriculum materials. In another section of this chapter, we discussed the apparently universal assumption that teachers who are adopting a practice need supporting curriculum materials.
- training. As we shall see below, all programs assume that adopters need some kind of training. The same is not true of training materials. Although some strategies include the dissemination of training materials, all do not. Some assume that adopters need training without concluding that they need to disseminate the training materials themselves.
- support from others familiar with the practice. Earlier, we noted that the PIP field test yielded evidence affirming that adopters experience a need for support, a finding that other programs had taken for granted. We would add, though, that this need does not dictate a one-on-one meeting between the developer and the adopter, but could instead consist of a gathering of several colleagues who were in the process of adopting the same practice.

Figure 5 shows which of the strategies appear to be based upon these assumptions about the needs of potential adopters. This leads us to:

Recommendation 18: Plan for external facilitators to both help potential adopters choose what to adopt and arrange for adopters to receive training and support.

According to our survey data (Bauchner, Eiseman, Cox & Schmidt, 1982), one kind of external facilitator activity proved more effective than all others. We labeled this activity "work on implementation specifics." Such activity includes planning implementation schedules, providing technical assistance or follow-up training, and assisting teachers in working out procedural details. Our data indicate that when external facilitators work on implementation specifics, adopting teachers tend to spend more time on activities such as analyzing the needs of the class, planning classroom use of the practice, reorganizing the class, and using the practice in the classroom. The more teachers spend time on these activities, the greater the change in classroom practice, and the more benefits they perceive to result from implementing the practice.

Although this chain of effects can argue for external facilitators maximizing their time on helping teachers with implementation, there is another strategy possible that we found working in much of our survey sample. External facilitators worked closely with local facilitators -- individuals in the central office who had major responsibility for implementation -- and it was the local

Figure 5: Comparison of Strategies with Respect to the Assumptions They Embrace Regarding What Potential Adopters Need to Implement a Practice

	Assistance in making choices	Curriculum materials	Training	Support from others familiar with the practice
Title IV-C	•	•	•	•
National Diffusion Network	•	•	•	•
Project Information Packages (early experimental phase)		•	•	
Follow-Through	•	•	•	•
Handicapped Children's Early Education Program	•	•	•	•
National Bilingual Network	•	•	•	•
Basic Skills Improvement Program	•	•	•	•

Note that the market linkage strategy is not included here because it has not been used to disseminate practices.

facilitators who actually delivered the specific implementation help. Consequently, we offer

Recommendation 19: In program guidelines, emphasize the importance of external facilitators helping with implementation specifics, or arranging for others to deliver this kind of assistance.

As we discuss the next issue, we see that although the strategies seem to agree on what is needed, there are differences among them with respect to how to provide it.

Who Should Serve as External Facilitators?

The programs we studied draw upon the services of four kinds of external facilitators:

- developers. These are practitioners, most often teachers, who developed or who have substantial experience with the practice.
- generalists. These are often state agency personnel, but sometimes are staff members of not-for-profit educational service organizations. To the extent that they have a specialty, it tends to involve understanding how schools and school systems function and change as organizations, and being skilled in how to facilitate the change process, one part of which has to do with experimenting with new practices.
- university faculty.
- salespeople. These individuals are employed by publishing companies. They usually sell textbooks to schools, and they treat the materials they are disseminating like any other set of curriculum materials for purchase.

Figure 6 shows which strategies draw upon the services of which kind of personnel. Our recommendation on this matter will deal only with the three external facilitator functions related to disseminating practices, leaving the matter of distributing materials until we take up the question of how the public and private sectors might work together. We believe that, for at least two functions, there is an optimal match between function and personnel. Below are these key functions, along with our comments regarding who, in general, performs them best.

Figure 6: Comparison of Strategies with Respect to the Kind of Personnel They Use as External Facilitators

	Developers	Generalists	University Faculty	Salespeople
Title IV-C	•		•	
National Diffusion Network	•	•		
Project Information Packages (early experimental phase)				
Follow-Through	•			
Handicapped Children's Early Education Program	•		•	
Market Linkage Program for Special Education				•
National Bilingual Network			•	
Basic Skills Improvement Program	•	•		•

- Assisting potential adopters in making choices. In our opinion, developers and salespeople have a vested interest in inducing potential adopters to choose their practice. For this reason, only when a potential adopter has already become interested in a particular developer's practice could we countenance a developer assuming a choice-assistance role, and then we would confine that role to helping the potential adopter to decide whether or not to experiment with that practice. Whenever potential adopters want someone to help them choose among options, we believe the appropriate kind of external facilitator is a generalist.
- Training. If there are practitioners close to the adopting site who have had direct experience with the practice being adopted (optimally, involvement in development), and if they have had experience in training educators, then they would be our first choice as trainers for the practice at hand. (Note that we are not simply saying that once trained, or once having used a new practice, a person can become a trainer. The notion of a "certified trainer," one who passes certain requirements established by the developer, is a good one here.)

Our second choice would be generalists, provided that they have participated several times in training sessions with the developer of the practice, and have observed use and spent time understanding users' experiences and concerns. Our third choice would be university faculty, provided that they were involved in developing the practice. Our reason for ranking university faculty so low is that, too often, teachers find that university faculty merely confirm their stereotype as (1) being out of touch with day-to-day classroom realities, (2) speaking too abstractly, and (3) being unable to show how the theory translates to action.

- Providing support. This function, as we mentioned above, can be fulfilled either on a one-on-one basis or by convening a group of adopters who find themselves in the same learning situation. When the support comes from the external facilitator, our position is that who should provide it is less a matter of type-of-professional than of personality. For example, if a developer is training an adopter, the developer would be the logical person to provide the support. But if the developer is not a very supportive person, then the support must either be foregone or found elsewhere. If a generalist has already been involved with the developer, and, as often happens, is close geographically to the adoption site, he or she would seem the logical choice. But it does not seem practical for generalists to become involved solely for the purpose of providing support, unless they do so by connecting the adopters with others.

The second method of arranging for support is convening others who also are in the process of implementing the practice. This is a function that developers, generalists, and university faculty should have the competency to perform, but they need to be in a position to identify the adopters who can form an alliance. Thus, unless several teachers from a district are involved in implementing a practice at the same time -- in which case one of the teachers or a central office staff person can assume the support function -- then the task will fall to the developer (or a certified trainer), or a generalist, whomever is available.

Pulling all this together, we offer

Recommendation 20: When disseminating practices, divide external facilitator functions so that generalists provide choice-assistance, and developers (or certified trainers) provide training.

Recommendation 21: When dividing roles among personnel, build in procedures to foster both coordination and cross-fertilization.

Recommendation 22: Ensure that disseminators alert adopters to the need for support and to various ways of obtaining it.

An efficient way to foster coordination is to incorporate this function into the role of the generalist. Thus, when the adopter has selected a practice to adopt, the generalist can contact the developer and provide any useful background information about the adopter's context. We recommend cross-fertilization because the generalist is likely to have accumulated expertise related to the generic processes of training and implementing practices, from which the developer can profit. In addition, the developer will have practice-specific information that can help the generalist do his or her job better. The optimal way to foster cross-fertilization is to encourage developers and generalists to train together. Furthermore, since trainers often possess different strengths, co-training increases the likelihood of meeting all the adopters' needs.

What Kinds of Support Do External Facilitators Need?

We divide our discussion of this question into two parts: incentives and help. With respect to incentives, we find that both tangible and intangible incentives play a part. Our survey

data reveal several intangible incentives, the sources of job satisfaction of the 89 external facilitators in our sample. These sources included contributing to education, meeting people, professional growth, and program success (Loucks, Cox, Miles, Huberman, & Eiseman, 1982). The same sources were cited in our census of all the external facilitators working in the NDN (Taylor, 1982).

It is important to keep these sources of satisfaction in mind as we turn to more tangible incentives. We have identified at least four kinds of incentives for external facilitators that carry implications for policymakers:

- future funding,
- profit, or at least a commission on sales,
- prestige, and
- travel. We need to add that for most external facilitators, the opportunity for travel has its greatest attraction during the first year or two. After that, many find it a mixed blessing.

Figure 7 shows which of these tangible incentives are available for each of the strategies that use conventional external facilitators. On the basis of knowledge of the programs and our analysis of the figure, we offer

Recommendation 23: Provide external facilitators with both economic incentives (either commissions or the possibility of future funding) and some form of less tangible incentive.

To elaborate on the latter point, among the ways of enhancing the role of external facilitators are: asking for their ideas for revising dissemination policy, and circulating a quarterly newsletter highlighting the accomplishments of outstanding external facilitators to educators in decision-making positions, (e.g., to superintendents, state departments of education, and regional laboratories and R&D centers).

With respect to assistance, we draw upon a study conducted by Harris, Eiseman, Harris and Doyle (1979) of technical assistance for Developer/Demonstrators of the NDN. The needs of D/Ds were grouped under the following headings:

- support needs. New disseminators in particular need support, whether it is logistical support in setting up awareness or training sessions, or moral support.

Figure 7: Comparison of Strategies with Respect to the Nature of the Incentives for Disseminators

	Future Funding	Profit	Prestige	Travel
Title IV-C	•		•	•
National Diffusion Network	•		•	•
Follow-Through (before joining NDN)	•		•	
Handicapped Children's Early Education Program	•		•	•
Market Linkage Program for Special Education		•		•
National Bilingual Network		•	•	•
Basic Skills Improvement Program	•	•	•	•

Note that the early experimental PIPs strategy is not included in this figure because it did not use conventional external agents.

- orientation needs. Again, it is the new disseminators that need help getting oriented. The content new external facilitators must master includes how their role fits with others involved in dissemination, what federal, state, and agency policies require of them, and how their dissemination responsibilities are to be integrated with their other responsibilities, if any.
- task needs. Usually new agents need assistance in understanding the various tasks they are to perform (which can include such activities as clarifying what is being disseminated and evaluating the effectiveness of an attempt to implement a practice), as well as help in acquiring the skills to carry them out. Furthermore, veteran external facilitators usually can profit from sharing their problems and solutions with each other.
- management needs. Harris and her colleagues found that external facilitators sometimes needed assistance in planning, documenting, involving colleagues, acquiring resources, and developing local support.
- relational needs. It was found that external facilitators desired interaction with colleagues who had similar roles, and occasionally needed assistance in clarifying roles and relationships.

Although Harris' study was focused on a group of disseminators that was facing some rather specialized conditions, we believe that the items we have cited above apply at one time or another to all external facilitators. Accordingly, we offer

Recommendation 24: Ensure that all external facilitators, especially those who are new, receive assistance in meeting their support, orientation, task, management, and relational needs.

Although at least one strategy for providing such assurance has been tried and found effective -- contracting with agencies capable of providing technical assistance -- there may be others.

How Can Federal and State Governments Interact Productively?

Among the eight federal programs that we studied, we found three different patterns of relating to state educational personnel:

- Ignore state personnel. These programs use procedures and personnel that bypass state agencies.
- Delegate full responsibility to state personnel. These programs allocate funds directly to the states.
- Work with state personnel. These programs form partnerships with state personnel, sometimes with personnel from the state department of education, other times with personnel in not-for-profit service organizations.

Figure 8 shows the orientations toward state personnel underlying each of eight strategies.

We find that programs that have started with the first orientation either have abandoned it for one of the others, combined it with one of the others, or failed to induce many teachers to use what they have disseminated. One advantage of delegating responsibility is that it is compatible with the political philosophy of states' rights. Delegating also gives responsibility to people who may already have relationships established with local educators. Finally, given that state bureau personnel often find themselves wielding sticks, delegating gives state people more carrots to offer.

The major advantage of working with state personnel is that a much wider range of projects is available to adopt. Is such partnership incompatible with the states' rights philosophy? We think not, since rather than being told what they must do, local educators are provided with an opportunity backed up with federally funded but state-based support. Perhaps one of the few roles of the federal government compatible with the states' rights philosophy is sponsoring the developmental activity that few states can afford, and making the results of such efforts available in ways that facilitate interstate exchange between state-based personnel.

On the basis of the above, we offer:

Recommendation 25: Incorporate into any federally sponsored dissemination activity a key role for state-based personnel.

Note that this recommendation does not endorse a particular strategy. Rather, there are four existing strategies which are consistent with this recommendation: Basic Skills and ESEA Title IV-C use state coordinators, NDN uses State Facilitators, and the most recent strategy for disseminating PIPs uses state coordinators.

Figure 8: Comparison of Dissemination Strategies with
Respect to Orientation Toward State Educational Personnel

	Ignore state personnel	Delegate full responsibility to state personnel	Work with state personnel
Title IV-C		•	
National Diffusion Network			•
Project Information Packages (Most recent strategy)			•
Follow-Through (Early strategy)	•		
Handicapped Children's Early Education Program (Early strategy)	•		
Market Linkage Program for Special Education	•		
National Bilingual Network	•		
Basic Skills Improvement Program			•

Recommendation 26: When an educational problem is pressing enough to justify a federally sponsored nationwide development effort, define the role of nationally based external facilitators to include cooperating with state-based external facilitators.

How Can the Public and Private Sectors Interact Productively?

In chapter nine, we commented that the Basic Skills Improvement Program was unique in combining a publicly funded diffusion strategy with a privately funded marketing strategy. As we indicated, however, BSIP's two approaches to dissemination operated on virtually separate tracks. Practices ready for dissemination went to the NDN; materials for publication went through LINC. This is an improvement over the "either/or" approach of many federal programs. However, BSIP's "both/and" approach might have been more effective if diffusion and marketing were integrated in a way that took advantage of both strategies. How might diffusion and marketing be integrated? The power of the marketing strategy is that materials are made available to a much larger audience than possible through public channels. But materials detached from the settings in which they were developed tend to lose their potency by the time a school district orders them from a catalogue, the materials arrive in a box, and teachers open it and read the instructions. In many cases, training enhances the possibility that use will follow. But publishers are less attracted to materials that can't stand alone. Here is where the power of the NDN comes in: training can be made available to purchasers/adapters at low or no cost. The obvious link is already occurring with several D/Ds, whose materials are available through private publishers. Having original developers and/or certified trainers available to provide implementation assistance at no cost to the purchaser might make publishers more interested in entering licensing agreements to publish materials developed with federal support.

How would this look in practice? Publishers would include information about available training with each set of materials sold. Adopters/purchasers could then decide if they needed any. A tool might be provided to help schools assess their training needs by determining how much of a change in their current practice would be required to use the new materials successfully. Depending on the amount of change necessary, different training options could be selected. This would appear to be a "full service" dissemination strategy.

Cooperative relationships between the public and private sectors are riddled with legal complications. In the past, these complications have put off people on both sides who would otherwise have been motivated to make it happen. However, many of these legal complications have been worked out by LINC Resources in their go-between role linking federal programs like BSIP to

private publishers. This has set the stage for broader complementary relationships between the federal government and private publishers in educational dissemination, all of which brings us to:

Recommendation 27: Explore the possibility of constructing licensing agreements under which publishers would agree to publish and market curriculum materials that support a validated practice, in return for the government's agreeing to fund external facilitators to help purchasers implement the practice.

Should Educational Dissemination Be a Generic Federal Function?

Traditionally, dissemination has been tied to specific programs because the legislative authority for it has been tied to specific programs. This has meant that the dissemination capabilities in the federal bureaucracy rise and fall with the fortunes of individual programs. If the future federal role in school improvement is to include dissemination, and if dissemination is viewed as a generic administrative function rather than a program-specific function, then it would appear reasonable to establish a place in the Department of Education or its successor that manages dissemination as a generic activity cutting across individual programs.

Our view is based somewhat upon the cost savings that can be achieved, but primarily upon the amount that is now known about effective dissemination. As programs matured, they tended to turn to the NDN to disseminate their validated practices. In a sense, then, the NDN is already a federal generic dissemination mechanism. At our current state of knowledge, it wastes taxpayers' money to continue to reinvent the wheel. We believe the NDN's major shortcoming is that it disseminates only validated practices. If the JDRP or some other mechanism screened promising practices (as our Recommendation 12 suggests), and if external facilitators were required to ensure that potential adopters understood (a) the difference between promising and validated practices, and (b) which of the two they were considering adopting, then we would consider the NDN to be an ideal vehicle for federal dissemination. Similarly, if corresponding changes were made to the Title IV-C strategy, we would view it as an ideal vehicle for federally sponsored within-state dissemination.

We summarize the above as:

Recommendation 28: Establish a centralized unit for disseminating both validated and promising (but screened) practices.

What Kinds of Research Will Help Resolve These Issues?

Of the various questions that lend themselves to empirical investigation, we note a few that we consider especially important:

Recommendation 29: Study the relationship between the various qualitative criteria mentioned in our discussion of Recommendation 3 (e.g., degree of implementation, institutionalization) and various outcome measures (e.g., student achievement).

In all probability, some of the criteria that appear logically related will turn out to have very few empirical relationships. A full investigation of this issue would involve (a) identifying the conditions under which any of the qualitative criteria have a high relationship to appropriate outcome measures, and (b) factors influencing the set of criteria that prove viable.

Recommendation 30: In line with our discussion of Recommendation 5, compare the impact on suitable outcome measures of adopting an appropriate practice vs. undergoing a problem-solving process.

Recommendation 31: Conduct a feasibility test of the notion of screening promising practices to ensure that they are coherent, intuitively sound, and needed.

What we have in mind here is a very modest study that Department of Education personnel can conduct themselves. The study would consist of convening an ad hoc group of bureau staff and asking each individual to examine descriptions of 20 practices. The purpose would be to determine whether or not they could reach a reasonable degree of agreement with respect to which practices qualify as "promising."

Recommendation 32: Conduct a feasibility trial on a small number of carefully selected practices of the kind of licensing agreement described in Recommendation 27.

SUMMARY

For the past fifteen years, the federal government has engaged in what might be called an "unplanned variation" experiment. Over the years, programs have been funded to meet special educational needs, and have met their obligations to do so in a variety of ways. At the time the earlier programs were funded, little was known about how to get learnings about what works into classrooms, especially when a learning took place in Peoria and a similar need was felt in Miami. Dissemination strategies have evolved, largely by trial and error, an evolution that has been truly frustrating to those who want immediate results from special funding. The sadness of this lengthy (but, we believe, necessarily so) evolution, is that just as we came to learn about the best ways to support school improvement by dissemination, an administration was elected that sought to eliminate, or at least severely limit, such support. As this volume describes, we have learned how to combine the various people, policies, and practices that are truly helpful to schools wanting to improve.

We hope our recommendations become more than just part of the federal archives. We have tried to make them general, so they can be applied at the federal, regional, or state level. They are useful for those promoting a limited federal role in education, with a maximum of local choice. We also believe they will be useful if and when the "pendulum swings back" and a more robust federal role is preferred. Above all, we believe that, taking these pieces of advice, the federal government can move closer to what everybody believes to be its role:

- to support those activities that are generic in function (so as not to go counter to the specific needs of any locality);
- to make the best use of resources by eliminating excessive duplication (such as an independent dissemination system within each state) and coordinating interstate exchange;
- to state by actions and not just words the need for high quality programs and practices in our nation's schools; and yet
- to rest firmly on the conviction that local choice is the key to the success of the educational enterprise, since those who are the closest to it -- teachers, parents, local administrators -- are the primary ingredients in school improvement.

This role implies a commitment to a federally coordinated dissemination system. The characteristics of that system are described below in a summary of our recommendations:

1. Maintain the unit in the federal government (the National Diffusion Network) that coordinates the dissemination of validated practices. Add promising (but screened) practices to its dissemination responsibility.
2. Combine commercial marketing of materials developed with federal support, with training available through federally funded disseminators.
3. Fund disseminators fully and encourage states to provide adopting schools with nominal dissemination assistance grants.
4. Fund external in-person assistance for all but conventional materials, dividing dissemination functions between generalists who provide choice-assistance and practitioner-developers (or certified trainers) who provide training. Require that external facilitators either provide or arrange for follow-up assistance and ongoing support for adopters at the school level.
5. Incorporate a role for state personnel into all federally sponsored dissemination efforts in a way that acknowledges their diversity of interest and capability.
6. Maintain quality control by continuing to validate practices; screen promising practices for coherence and responsiveness to an identified need.
7. Disseminate only validated practices when a sufficient pool of practices exists to address a practitioner need; disseminate promising practices only when such a pool does not exist and the need is urgent.
8. Disseminate materials alone only when they do not require major changes in teaching; disseminate practices (i.e., materials plus teaching strategies and activities) when major changes are anticipated.
9. Carefully establish criteria for the success of dissemination efforts, considering a wide range of both quantitative and qualitative objectives, and varying the criteria by the stage of the development of the area of interest.

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